Session Focuses on Checkpoint Inhibitors

While smoking is clearly the major risk factor for developing lung cancer, the disease will develop in about 25% of long-time heavy smokers, and 20% to 25% of patients with lung cancer have no history of smoking, indicating additional influences in the development of this disease. At the Opening Plenary Session Sunday night, Nobel Laureate Prof. Harald zur Hausen, University of Heidelberg, Germany, explored the possible role of viral, bacterial, and fungal infections in the development of lung cancer.

All oncogenic viruses require genetic or epigenetic modifications in order for cancer to develop because the viral infections themselves are not sufficient for malignancy. In fact, it is estimated that about 21% of the global incidence of cancer is linked to infections, which include parasites, bacteria, and viruses; in about 71% of these cases, the infections are preventable by chemotherapy, antibiotics, or vaccines. In a healthy individual, cellular signaling cascades in proliferating cells effectively prevent viral oncomgenes from developing into metastases. However, the interruption of the cellular signaling creates an opportunity for increased expression of viral oncogenes from developing into metastases. However, the interruption of cellular signaling may be due to chemical interactions; examples of this synergistic virus-environment relationship include the interaction of hepatitis C virus and alcohol consumption in liver carcinogenesis, as well as the interaction of human papilloma virus (HPV) and smoking in cervical cancer risk. Prof. zur Hausen received the Nobel Prize for Medicine in 2008 for his research in identifying a link between HPV infection and cervical cancer.

Current research is targeted at investigating synergistic interactions that may lead to the development of lung cancer. Prof. zur Hausen discussed several pathogenic viruses that, although not harmful for animals, may become carcinogenic when transferred to humans. In this context, Prof. zur Hausen discussed the increased risks of lung and oropharyngeal cancer among butchers, slaughterhouse workers, and delicatessen workers. The current hypothesis is that contaminates originating from slaughtered animals lead to the development of malignancies in these workers.

The relationship between red meat consumption and colon cancer has been well established epidemiologically. Red meat has a high association with colon cancer, Prof. zur Hausen said, and red meat and milk both have moderate associations with breast, lung, and prostate cancers. Interestingly, consumption of chicken and fish are not related to increased cancer risk. The evidence for a connection between bovine milk consumption and cancer is not yet established. However, some evidence suggests that the risk for lung and breast cancers are lower among lactose-intolerant individuals, which raises questions about a potential interaction between bovine milk consumption and cancer development. In a recently published article from Sweden, there was a 21% reduction in the risk of breast cancer among individuals with lactose intolerance, and a 45% reduction in the risk of lung cancer. Using global epidemiologic data on lung cancer, smoking, and dairy beef consumption, Prof. zur Hausen presented evidence that bovine milk consumption might reduce the risk of lung cancer.

Prof. zur Hausen: Research Suggests Role of Infection in Development of Lung Cancer

Claire Verschraegen, MD, MS, discussed how first-lineavelumab monotherapy showed clinical activity and was well tolerated in patients with NSCLC that was EGFR-wild type/ALK-negative and who were unselected for PD-L1 expression. These findings were discussed by Claire Verschraegen, MD, MS, University of Vermont Cancer Center, Burlington, USA, who presented data from a dose-expansion cohort (156 patients who received 10 mg/kg IV every 2 weeks) of the phase 1 JAVELIN Solid Tumor trial, a study that is assessing the safety and preliminary activity of first-lineavelumab in patients with advanced NSCLC. Patients were unselected for PD-L1 expression and did not have an activating EGFR mutation or ALK translocation. The median treatment duration was 20 weeks, and the minimum follow-up was 13.0 weeks for all patients and, to date, 64 patients continue with treatment.

In general, Dr. Verschraegen said,avelumab appeared to be well tolerated in patients with advanced NSCLC.
Lung age is an accurate predictor of postoperative cardiovascular complications for patients who have combined pulmonary fibrosis and emphysema (CPFE) and lung cancer. Lung age is a measurement of lung function based on the 1-second forced expiratory volume (FEV1.0), while taking into account both height and gender. At an Oral Abstract Session on Monday morning, Masahito Naito, MD, Kitasato University School of Medicine, Minato, Japan, presented results of a study on 36 patients who had resected lung cancer and comorbid CPFE. Dr. Naito and his colleagues measured the difference between patients’ so-called real age and their lung age (RA-LA) and created three groups: group A, RA-LA >0; group B, -15 ≤ RA-LA ≤ 0; and group C, RA-LA < -15. There were 10, 13, and 13 patients in group A, B, and C, respectively.

The researchers then evaluated the relationship between lung age and postoperative complications.

The study population was an average of 70 years old and 89% were men; there were no significant baseline differences between the groups in terms of age, sex, history of smoking, or hospital length of stay. The average length of stay was 16 days. Postoperative complications were common and were evenly distributed throughout the three groups. The most commonly occurring complication was pneumonia (five patients), followed by arrhythmia and hypertension (four patients each), and air leakage and hypoxemia (three patients each). When researchers evaluated complications across all three groups, the differences in postoperative complications were not significant; however, when cardiovascular complications were considered, the rate of complications was significantly higher in group C than in the other two groups combined (Table). This finding indicates that for patients with a lung age of 15 years or more higher than real age, lung age accurately predicted postoperative cardiovascular complications in patients with lung cancer and CPFE.

<table>
<thead>
<tr>
<th>Cardiovascular</th>
<th>Group A+B</th>
<th>Group C</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6</td>
<td>&lt;0.001</td>
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<table>
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<tr>
<th>Respiratory</th>
<th>Group A+B</th>
<th>Group C</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>5</td>
<td>0.825</td>
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Former Austrian President Welcomes Delegates

On Monday morning, Heinz Fischer, former president of Austria, gave the opening address before the Plenary Session: Tobacco Control. Mr. Fischer was president of Austria from July 2004 until July 2016 and had previously served as the Secretary General for Science from 1983 to 1987. Mr. Fischer began his talk by welcoming WCLC delegates, as well as Dr. Tabare Vazquez, President of Uruguay, whom he invited to WCLC 2016.

Lung cancer is a real problem for humanity, said Mr. Fischer, and he mentioned that he had recently read facts and figures associated with lung cancer and was shocked about the suffering and death that lung cancer causes. He discussed the major role that tobacco plays in causing lung cancer and then cited the experience of President Vazquez as being a unique example of how hard the fight against tobacco in general and tobacco companies can be. “I am not a doctor,” said Mr. Fischer, “and I don’t intend to present some figures or arguments but of course I am happy that I can host you as the former Austrian President... I am proud that you have chosen Vienna as the venue for this conference because Vienna has a special place in Europe, not only because of its history, also because of its geographic position.”

Fischer concluded by saying, “The subject you are discussing in the congress and this week is a subject that directly touches the health and the lives of millions of people... One of the organizers told me that the number of deaths from lung cancer is as big as if each day there are more than one hundred big jet crashes... I know you cannot compare these two things but to have an image as far as the numbers are concerned, it was very impressive to hear this.” He ended his address by wishing all delegates a successful congress and a very pleasant stay in Vienna and Austria.
Special Session Provides Overview of Updated Guidelines for Molecular Testing

Three years have passed since the publication of “Molecular Testing Guideline for Selection of Lung Cancer Patients for EGFR and ALK Tyrosine Kinase Inhibitors,” the joint guideline developed by the College of American Pathologists (CAP), the International Association for the Study of Lung Cancer (IASLC), and the Association for Molecular Pathology (AMP). A Special Session on Monday morning was offered to discuss an update to the guideline. The session was led by three members of the CAP/IASLC/AMP Lung Cancer Biomarkers Revision Workgroup: Yasushi Yatabe, MD, PhD; Eric Bernicker, MD; and Ming Tsao, MD.

The original guidelines addressed the questions of who, what, and how to test. The update was prompted by several factors, including newly discovered biomarkers with targeted therapies (ROS1, MET, ERBB2, BRAF, RET, KRAS, and PKN4/5) and new markers of resistance, advances in technology (immunohistochemistry [IHC], next-generation sequencing, and circulating cancer cells and cfDNA), and reconsideration of testing in squamous and small cell cancers. In addition, Dr. Yatabe noted that guidelines should be updated periodically, as the National Guideline Clearinghouse considers a guideline out of date if no updates have been published in at least 5 years.

After presenting case studies to illustrate the updated recommendations, the speakers provided an overall summary of the updated guidelines, noting that the 2013 recommendations are largely unchanged. No new targets for squamous or small cell cancer have been identified, so testing remains limited to patients with advanced stage lung cancers with an adenocarcinoma component.

When testing in the setting of acquired resistance, testing for the EGFR T790M mutation is recommended, as it occurs in approximately 50% of patients who have relapse after treatment with an EGFR inhibitor. In addition, T790M-specific therapy is available (osimertinib). Testing in the setting of relapsed disease needs to be very sensitive; the recommended cutoff for T790M is 4% cancer cells. For resistance due to other mechanisms or for resistance to treatment with an ALK inhibitor, there is currently insufficient evidence for or against testing.

In terms of what to test for at the time of initial diagnosis, the new guideline recommends adding ROS1 testing for all patients and adding testing for BRAF, ERBB2, MET, and RET if a large panel is being done. PDL1/PD1 testing is important, but data do not support circulating tumor cell testing.

Dr. Yatabe said that these revisions are all based on evidence from an unbiased review of published experimental literature since 2013 and include recommendations from an expert panel of renowned worldwide leaders in the field. A draft of the guidelines was available for open comment over the summer, and a final draft has been completed and is on schedule to publish in early 2017 in the Journal of Thoracic Oncology, the Journal of Molecular Diagnosis, and Archives of Pathology & Laboratory Medicine.

Early Ambulation following VATS

Ambulation following surgery improves patient health and quality of life and prevents complications. One surgical team has shown that ambulation is possible directly following video assisted thoracic surgery (VATS), even within 1 hour after the procedure. Sandeep Khandhar, MD, Inova Health System, Falls Church, USA, presented results from the Walking After VATS Experiment (WAVE), which took a multidisciplinary approach to early ambulation following VATS. WAVE data were collected from July 2010 to July 2016. During that time, 1,172 patients who underwent thoracic surgery at the Inova Health Center were recovered through the WAVE program. Patients who underwent thoracotomy, endoscopic-only procedures, and mediastinoscopy were excluded from the program.

Dr. Khandhar and his colleagues measured distance walked within 1 hour following extubation, with a target of 250 feet. Within the first hour, 798 patients (69%) walked any distance and 721 patients (63%) achieved the target distance. Additionally, 944 (82%) achieved the target distance at any time while in the post-anesthesia care unit (PACU), and 37 patients (3%) were unable to walk at all while in the PACU. Throughout the study period, there were no adverse events, including falls or fractures, and no increase in postoperative complications were seen beyond what would typically be expected in this patient population. The mean length of stay was 1.6 days.

The WAVE outcomes show that early, aggressive ambulation is possible in nearly all patients directly following VATS. Dr. Khandhar emphasized the physical and psychosocial benefits of ambulation, as well as the need to include a multidisciplinary team in early ambulation efforts, including nurses and floor staff, as well as patients and their caregivers. Focus on the team, he said, rather than the surgeon. The Inova center doubled their PACU staff to ensure adequate personnel for the WAVE program, and the additional support ensured positive ambulatory outcomes for patients who underwent VATS.

Join the Twitter conversation. Tweet about your conference experience, use #WLC2016 and @IASLC.
Patients with advanced small cell lung cancer (SCLC) have limited treatment options and poor survival following failure of platinum-based chemotherapy. Pembrolizumab, a humanized anti–programmed death 1 (PD-1) antibody, has demonstrated robust antitumor activity and a favorable safety profile in multiple tumor types. Pembrolizumab was recently approved by the US Food and Drug Administration as first-line therapy for patients with advanced NSCLC with PD-L1 tumor proportion score (TPS) ≥50% and no sensitizing EGFR or ALK aberrations. Patrick Ott, MD, PhD, Dana-Farber Cancer Institute, Boston, USA, presented the results.

The primary endpoint of CheckMate 012 was safety and tolerability, with objective response rate and progression-free survival being secondary endpoints. Overall survival and efficacy according to PD-L1 expression are exploratory endpoints. The majority of patients had PD-L1 expression in at least 1% of tumor cells (67% to 72% of patients) and around 20% had PD-L1 expression in at least 50% of tumor cells (18% to 25% of patients).

Dr. Ott presented updated data on 129 patients with a median follow-up of 22 months (monotherapy) and 16 months (combination therapies). First-line nivolumab alone resulted in a median overall survival of 21.8 months and 1-year and 2-year survival rates of 73% and 44%, respectively. Addition of ipilimumab resulted in a higher objective response rate, a longer progression-free survival (median, 8.0 months) and a nonsignificantly higher overall survival rate of 76% at 1 year. Efficacy was improved for patients who had at least 1% of tumor cells with PD-L1 expression but activity, including complete response, was found in patients who had fewer than 1% of tumor cells with PD-L1 expression.

Nivolumab in combination with ipilimumab was generally well tolerated, with no new safety signals or treatment-related deaths being reported on longer follow-up. Although combination therapy was associated with more grade 3 or 4 toxicities than nivolumab monotherapy, these toxicities were generally manageable, with similarly low rates of treatment discontinuation due to toxicity, said Dr. Ott.

Although patients were not selected based on tumor PD-L1 status for this trial, analysis by tumor PD-L1 expression did suggest enhanced efficacy with both nivolumab alone and in combination with ipilimumab with increasing tumor PD-L1 expression. That said, activity was seen in tumors with no PD-L1 expression.

An ongoing phase III trial, CheckMate 227, is evaluating first-line combination therapy with nivolumab and ipilimumab in two populations: (1) patients with PD-L1-expressing tumors, compared with nivolumab alone or standard platinum-doublet chemotherapy, and (2) patients with PD-L1 nonexpressing tumors, compared with standard platinum-doublet chemotherapy with or without concurrent nivolumab.

CheckMate 057
Early survival data indicate that the benefit-risk profile of nivolumab was favorable compared with docetaxel among pretreated patients with advanced nonsquamous NSCLC. The data are from CheckMate 057, a global phase III trial, and Solange Peters, MD, PhD, University of Lausanne, Lausanne, Switzerland, presented the results.

Dr. Peters reported that nivolumab was associated with a significantly longer median overall survival than docetaxel (12.2 vs 9.5 months; HR: 0.75; 95% CI: 0.63-0.91). In an exploratory post-hoc multivariate analysis, patients with poor prognostic factors and/or more aggressive disease combined with little or no PD-L1 expression appeared to be at higher risk of dying during treatment with nivolumab compared with docetaxel; however, most patients treated with nivolumab were alive for more than 3 months. Dr. Peters said that additional biomarker research is ongoing to enable identification of patients with advanced NSCLC who may derive the most benefit from nivolumab.

Although PD-L1 expression may help inform individual treatment decisions, PD-L1 expression is not considered an appropriate biomarker for nivolumab treatment selection in pretreated advanced NSCLC, but rather should be considered in the context of other patient and disease characteristics, said Dr. Peters.

Pembrolizumab Shows Promising Antitumor Activity in PD-L1–Positive Advanced SCLC

Patients with advanced small cell lung cancer (SCLC) have limited treatment options and poor survival following failure of platinum-based chemotherapy. Pembrolizumab, a humanized anti–programmed death 1 (PD-1) antibody, has demonstrated robust antitumor activity and a favorable safety profile in multiple tumor types. Pembrolizumab was recently approved by the US Food and Drug Administration as first-line therapy for patients who have advanced NSCLC with PD-L1 tumor proportion score (TPS) ≥50% and no sensitizing EGFR or ALK aberrations. Patrick Ott, MD, PhD, Dana-Farber Cancer Institute, Boston, USA, presented the results.

Table. Results of Phase Ib Trial of Pembrolizumab in Patients with PD-L1–Positive Advanced SCLC

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective response rate</td>
<td>37.5% (95% CI: 18.8%-59.4%)</td>
</tr>
<tr>
<td>Duration of response (median)</td>
<td>9.0 mos. (range, 1.9-19.9+ mos.)</td>
</tr>
<tr>
<td>Progression-free survival (median)</td>
<td>1.9 mos. (95% CI: 1.7-5.9 mos.)</td>
</tr>
<tr>
<td>6-month</td>
<td>29.8%</td>
</tr>
<tr>
<td>12-month</td>
<td>24.8%</td>
</tr>
<tr>
<td>Overall survival (median)</td>
<td>9.7 mos. (95% CI: 4.1 mos.-not reached)</td>
</tr>
<tr>
<td>6-month survival</td>
<td>66.0%</td>
</tr>
<tr>
<td>12-month survival</td>
<td>35.7%</td>
</tr>
</tbody>
</table>

The primary endpoint of CheckMate 012 was safety and tolerability, with objective response rate and progression-free survival being secondary endpoints. Overall survival and efficacy according to PD-L1 expression are exploratory endpoints. The majority of patients had PD-L1 expression in at least 1% of tumor cells (67% to 72% of patients) and around 20% had PD-L1 expression in at least 50% of tumor cells (18% to 25% of patients).

Dr. Ott reported that the objective response rate was 37.5%, with one complete and eight partial responses among the 24 evaluable patients. The median duration of response was 9.0 months (range, 1.9-19.9+ months).

He also reported data on progression-free and overall survival (Table). Of the 24 patients, 16 (66.7%) experienced treatment-related adverse events. Two patients experienced grade 3-5 treatment-related adverse events: one patient had an elevated bilirubin level (grade 3) and one patient experienced grade 3 asthenia and grade 5 constipation.

Dr. Ott concluded that this trial in pretreated patients demonstrated encouraging antitumor activity. The responses were found to be durable and may have led to an overall survival benefit for the subset of patients who achieved objective responses with pembrolizumab.
Experts to Offer Ways to Improve Accessibility and Affordability in Cancer Care

One of IASLC’s main priorities is working to ensure that people with lung cancer receive the care and treatment they need. However, despite advances and novel therapies in thoracic oncology, accessibility and affordability often prevent newer treatments from reaching patients. A Wednesday session will assemble speakers from the United Kingdom, the United States, Israel, Brazil, and Thailand to discuss access and affordability, including how their national health care systems determine the value of drugs to decide what drugs will be made available.

Gilberto de Lima Lopes Jr., MD, MBA, FAMS, will highlight disparities in treatment options between patients in high-income versus low-income countries, as well as strategies that may mitigate the disparities. Dr. Lopes, from the Sylvester Comprehensive Cancer Center and the Miller School of Medicine at the University of Miami, USA, will offer solutions for low-income countries during his presentation.

During his talk, Dr. Lopes will advocate for the establishment of a universal health care system, policies on the use of high-quality generic medications and biosimilars, compulsory licensing, affordable pricing, and innovative financing, such as the creation of a global fund to support cancer treatments in low-income countries.

Sumitra Thongprasert, MD, will discuss the experience in Thailand to overcome the high costs of cancer drugs. The Professor Emeritus on the Faculty of Medicine at Chiang Mai University will describe her country’s three-pronged universal health care system, which has been able to cover 99.5% of the population since its inception in 2002. Despite this impressive scope of coverage at a relatively low cost, Dr. Thongprasert says, challenges remain. She will describe these challenges, which include how and where to raise sufficient funds, how to overcome other financial barriers that exclude poor people from accessing health services, and how to provide an equitable and efficient mix of health services. In particular, she will describe the process to get treatments added to the National List of Essential Medicine, including the reasons treatments are excluded: cost effectiveness/budget impact, excessive cost, and uncertain clinical benefit.

Dr. Thongprasert hopes attendees will take away the message that “equality doesn’t mean equity.” She advocates “consistent political support and cooperation among all health system stakeholders to assess whether the use of expensive medicines is equitable, clinically appropriate and effective, and affordable at household and system levels.”

Other experts speaking at the session include Ronan J. Kelly, MBA, MBBCh, MD, Johns Hopkins University, Baltimore, USA, and Nathan Cherny, Shaare Zedek Medical Center, Israel, who will discuss value-based assessments in lung cancer therapy from the North American and European Society for Medical Oncology perspectives, respectively. In addition, Richard Sullivan, MD, PhD, Institute of Cancer Policy, UK, will discuss the global challenge of the affordability of novel therapies.

This symposium is not intended for physicians practising in the USA

WCLC 2016 Industry Satellite Symposium

Harnessing the power of immunotherapy and targeted therapy: translating evidence into practice

Tuesday 6 December 2016
17.45–19.15
Hall C2

Faculty
Dr David Spigel USA (Chair)
Prof Frank Griesinger Germany
Dr Federico Cappuzzo Italy
Dr Achim Rittmeyer Germany

This presentation was approved by the IASLC 17th World Conference on Lung Cancer Program Committee as an independent activity held in conjunction with the IASLC 17th World Conference on Lung Cancer. This presentation is not sponsored or endorsed by IASLC.

This symposium is not intended for physicians practising in the USA
The study is unique in two important ways, says Dr. Hirsch. First is the fact that companies that are all business competitors were willing to collaborate to try to solve some important issues. Second is that the assays were compared as they are used in clinical trials, even though not all of them were as yet approved and commercialized. Since the study began, three of the PD-L1 assays have been approved by the US Food and Drug Administration (FDA) in NSCLC, and one is expected to gain approval in this indication in the near future.

Phase 1 of the Project is a feasibility assessment that included a limited number (39) of NSCLC cases stained with all four investigational-use-only assays as used in clinical trials and assessed by trained pathologists from the two diagnostic companies. The goal of Phase 1 was to compare the “analytical staining factors” reported as percentages of stained cells, as well as selected treatment-determining scoring algorithms developed for each assay and used in clinical trials. The data generated provide early insights into relative analytic comparisons of the four PD-L1 IHC assays in NSCLC.

Although the study included a low number of NSCLC cases and pathologists, the data from the study will begin to inform questions already being discussed in the wider community, such as “How interchangeable might these assays be?” and “Can an alternative assay be used, and if so, should it be read according to the rules for the assay used, or for the drug to be prescribed?” The authors emphasize that the BluePrint project is “purely a study comparing assay technical performance” and provides no data on the clinical predictive power of alternative PD-L1 IHC testing strategies.

The results from Phase 1 were used to design a larger, more comprehensive Phase 2 study, which is ongoing. The BluePrint Project was launched from a public workshop, “Complexities in Personalized Medicine: Harmonizing Companion Diagnostics Across a Class of Targeted Therapies,” which was held in spring 2015 and co-sponsored by the FDA, the AACR, and the American Society of Clinical Oncology.

Can Tumor-Mediated PD-L1 Inhibition Potentiate CAR T-Cell Therapy?

Dr. Morello and her team studied the effects of tumor PD-L1 upregulation on CAR T-cell exhaustion and anti-tumor efficacy. They also developed T-cell extrinsic and intrinsic strategies to overcome inhibition of PD-L1 in models of both lung cancer and malignant pleural mesothelioma (MPM).

In conclusion, said Dr. Morello, the single dose of M28z CAR T-cells resulted in temporary disease control but mice eventually died. Analysis of tumor samples showed PD-1 and PD-L1 up-regulation on CAR T-cells and tumor cells. Inhibition of M28z T-cell effector functions by PD-L1 was confirmed in vitro. Addition of PD-1 blocking potentiated CAR T-cell therapy but was transient. In comparison, said Dr. Morello, a single dose of M28z T-cells coexpressing PD1-DNR restored effector functions, enhanced tumor control, and prolonged median survival. Additionally, converting PD-L1 inhibition into a positive costimulatory signal by PD-1/4-1BB construct cotransduction in M28z CAR T-cells increased T-cell accumulation and cytokine secretion.

In conclusion, said Dr. Morello, the results show that potentiating CAR T-cell therapy via optimal costimulation and coinhbitory blockade to counteract PD-L1/PD-1 immunosuppression results in therapeutic benefit in mouse models of lung cancer and MPM.
Tobacco is estimated to cause more than 6 million deaths per year. It is the most significant cause of preventable deaths and foes to an estimated 10% of cancer worldwide. In a Monday session, allied health experts from around the world gathered to discuss how to better prevent tobacco use and treat tobacco dependence, thereby reducing the incidence of lung cancer.

During the presentation, China at the Crossroads: Findings from the ITC [International Tobacco Control] China Project on the Current State of Tobacco Control in China, social psychologists Geoffrey Fong, PhD, DrPH, University of Waterloo, Canada, emphasized that China has the biggest tobacco problem in the world but that it is not adequately implementing the World Health Organization’s (WHO’s) Framework Convention on Tobacco Control (FCTC). The ITC Project, which is the largest tobacco research program in the world and evaluates the actual impact of FCTC policies, conducted an extensive longitudinal cohort survey in five major cities and five rural areas in China.

The Project researchers found that China has largely failed to implement many of the key tobacco-control measures of the FCTC, particularly large graphic health warnings; comprehensive smoke-free laws in public places; sufficiently higher taxes to reduce demand for tobacco products, so they commonly find a way into pension funds and mutual funds. In her presentation, Global View of Smoking Cessation, Stella Bialous, RN, DrPH, University of California School of Nursing, United States, agreed that prevention of tobacco use is very important, but she added that treating tobacco dependence and encouraging smoking cessation “must be integral to tobacco control in order to achieve meaningful, significant reduction in the suffering, disease, and death caused by tobacco.”

Unfortunately, Dr. Bialous said, WHO estimates that only about 15% of the world’s population has access to evidence-based smoking-cessation resources and that research indicates that patients do not receive adequate support to quit after being diagnosed with cancer. However, she pointed out that research has demonstrated significant advantages to quitting after a cancer diagnosis, including better treatment outcomes, longer survival, and better quality of life.

Therefore, she urged nurses and other allied health professionals in all settings—primary care clinics, hospital wards, palliative care settings, and everywhere in between—to intervene with evidence-based smoking-cessation practices during all stages of the cancer continuum, not only as a measure of cancer prevention but also from the standpoint of patient-clinician communication. She believes that nurses, as the largest health care group, have a moral obligation to be smoke-free role models to their patients, families, and society as a whole. She added, “Nurses should not underestimate the unspoken influence they carry.”

Tobacco-Free Portfolios

As a young physician treating patients with lung cancer in Melbourne, Australia, Dr. Bronwyn King discovered that her hospital’s pension fund had invested her money in the very tobacco products that were killing her patients.

“I discovered that through my compulsory pension fund, I was invested in and actually owned a part of several tobacco companies, I couldn’t just do nothing, I had to take action,” she says.

During her investigation of how tobacco company stocks get selected, she realized that in addition to occasions when being selected actively for investment, tobacco companies are usually wrapped up in default investment portfolios, so they commonly find a way into pension funds and mutual funds. She believed that if she could educate investors about these selections and their impact, she could help reduce the amount of investment in tobacco stocks.

To accomplish this, Dr. King founded the Tobacco Free Portfolios website (www.tobaccofreeportfolios.org), whose mission is “to inform, prioritize and advance tobacco free investment by eliminating tobacco from investment portfolios across the globe.”

Dr. King says that the tobacco-free investment movement has been excellent and her conversations in large cities around the world, such as Vienna, Paris, Singapore, London, and New York are received with the same concern as the conversations she had in her own country. There are now 35 tobacco-free pension funds in Australia, which represents approximately 40% of all funds.

“Tobacco is everyone’s problem, not just the doctors who provide the care and treatment. We should all feel obliged to do something about it and all those with investments, including those through compulsory pension schemes have a role to play,” she said.
Plenary Session Features Top Four Immunotherapy Abstracts

Attnedees at Wednesday’s Plenary Session will hear from four investigators who will discuss the top abstracts submitted in immunotherapy. Speaking will be Julie Brahmer, MD, Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins, Baltimore, USA; Shiris Gadgeel, MD, Karmanos Cancer Institute/Wayne State University, Detroit, USA; Marina Garassino, MD, Fondazione IRCCS Istituto Nazionale dei Tumori, Milan, Italy, and Julien Adam, MD, Gustave Roussy Cancer Campus, Villejuif, France.

**Health-Related Quality of Life for Pembrolizumab vs Chemotherapy in Advanced NSCLC with PD-L1 TPS ≥50%: Data from KEYNOTE-024**

Pembrolizumab, a humanized anti-programmed death 1 (PD-L1) antibody, has demonstrated robust anti-tumor activity and a favorable safety profile in multiple tumor types. In KEYNOTE-024, pembrolizumab provided superior progression-free survival over platinum-based chemotherapy as first-line therapy for patients with advanced NSCLC with programmed death ligand-1 (PD-L1) expression in ≥50% of tumor cells and no sensitizing EGFR or ALK aberrations (HR: 0.50, p<0.001). Pembrolizumab was recently approved by the US Food and Drug Administration (FDA) as first-line therapy for patients with advanced NSCLC with PD-L1 tumor proportion score (TPS) ≥50% and no sensitizing EGFR or ALK aberrations.

Dr. Brahmer will report new data from the prespecified exploratory patient-reported outcomes analysis of KEYNOTE-024 showing that pembrolizumab was associated with a clinically meaningful improvement in health-related quality of life compared with platinum-based chemotherapy. Symptoms and functioning were also improved or maintained to a greater degree with pembrolizumab compared with platinum-based chemotherapy. “Combined with the superior progression-free survival and overall survival and manageable safety profile, pembrolizumab may be a new standard of care for first-line treatment of advanced NSCLC with tumor PD-L1 positivity,” says Dr. Brahmer.

**OAK, a Randomized Phase III Study of Atezolizumab vs Docetaxel in Patients with Advanced NSCLC: Results from Subgroup Analyses**

Atezolizumab is a fully humanized, engineered monoclonal antibody of IgG1 isotype against the protein PD-L1. Atezolizumab inhibits PD-L1 binding to its receptors PD-1 and B7.1, thereby restoring tumor-specific T-cell immunity. It was approved in October by the US FDA for the treatment of patients with NSCLC whose disease progressed during or after chemotherapy.

Dr. Brahmer will present the results of new subgroup analyses of patients enrolled in the OAK trial, a global, multicenter, randomized, open-label study evaluating atezolizumab vs docetaxel after failure of platinum-containing chemotherapy in a biomarker-unselected NSCLC population. “These results demonstrate that atezolizumab improved overall survival regardless of histology or PD-L1 status as measured by immunohistochemistry or tumor gene expression,” explains Dr. Gadgeel.

**Durvalumab in ≥3rd-Line Locally Advanced or Metastatic, EGFR/ALK Wild-Type NSCLC: Results from the Phase 2 ATLANTIC Study**

Durvalumab is a selective, high-affinity, engineered human IgG1 monoclonal antibody that blocks PD-L1 binding to PD-1 and CD80. In a first-in-human trial (NCT01693562) durvalumab monotherapy showed durable responses in heavily pretreated patients with solid NSCLC tumors. Initial data indicated that high PD-L1 expression (≥25% of tumor cells with membrane staining according to the Ventana immunohistochemical [SP263] assay) may enrich response to durvalumab. A comprehensive clinical development program of durvalumab, both as monotherapy and in combination, is underway in NSCLC.

Dr. Garassino will discuss late-breakthrough results from the ATLANTIC study (NCT02087423), a phase II, open-label, international, multicenter, non-comparative trial to assess the clinical activity and safety of durvalumab in patients with stage IIIb–IV NSCLC. The study includes three patient cohorts; Dr. Garassino will report the final results in patients with wild-type EGFR and ALK and high tumoral PD-L1 expression.

**Multicentric French Harmonization Study for PD-L1 IHC Testing in NSCLC**

Dr. Adam will report results from the first and largest multicenter study comparing laboratory-developed tests and PD-L1 assays (28-8, 22C3, SP263) for PD-L1 testing. The use of laboratory-developed tests is required in some countries (such as France) depending on clinical need, availability of immunohistochemistry platforms, and reimbursement of tests. PD-L1 assays were highly concordant for tumor cell staining. Half of the laboratory–developed tests demonstrated similar concordance. Low concordance rates were observed in immune cell staining for assays as well as laboratory-developed tests. “These results suggest that with further validation, laboratory-developed tests may be an option for PD-L1 testing,” says Dr. Adam.

**Mutation-Associated Neoantigen Reactivity May Play a Role in Response to Anti-PD-1 Immunotherapy**

In patients with NSCLC, checkpoint inhibitor immunotherapy targeting programmed death receptor 1 (PD-1) or its ligand, PD-L1, has resulted in the clinical responses not previously seen with systemic therapies. Kelli N. Smith, PhD, Johns Hopkins University School of Medicine, Baltimore, USA, will discuss her research into mutation-associated neoantigen (MANA) reactivity as a possible mechanism underlying response following checkpoint blockade with the PD-1 inhibitor nivolumab.

In the United States, nivolumab is approved for use in BRAF V600 wild-type and mutation-positive unresectable or metastatic melanoma, metastatic NSCLC, advanced renal cell carcinoma, Hodgkin lymphoma, and recurrent or metastatic squamous cell carcinoma of the head and neck.

“NSCLC is typically seen as non-immunogenic, however, heavily pretreated patients treated with nivolumab show objective response rates of 15% to 20% and have a median duration of response of 17 months,” says Dr. Smith. “Although tumor PD-L1 expression may be a biomarker of sensitivity to anti-PD-1 therapy, and the number of somatic mutations may play a role in PD-1 upregulation on T cells, the mechanisms underlying response vs progressive disease have yet been fully elucidated,” she adds.

Mutation-associated neoantigens are the product of nonsynonymous somatic variations randomly acquired by malignant cells as a result of deregulated progression through the cell cycle. Evidence from both murine and human studies suggests that mutation-associated neoantigens play a significant role.
Immunotherapy Has Changed the Treatment Paradigm for Patients with Non-Small Cell Lung Cancer

Novel treatments that harness the immune system have emerged as a way to deliver more individualized and potentially less-toxic treatments to people with lung cancer. And the use of immunotherapeutic agents continues to grow. "As of a month ago, immunotherapy as first-line treatment for advanced non-small cell lung cancer," says Roy Herbst, MD, PhD, Yale School of Medicine, Yale Cancer Center, and Smilow Cancer Hospital, New Haven, USA. "So we have a totally new paradigm for treatment."

Two sessions on Tuesday will address this new treatment paradigm and provide attendees with state-of-the-art information about immunotherapeutic approaches in lung cancer. Lung cancer physicians wishing to stay abreast of these rapidly evolving treatments should attend the sessions.

The session on Tuesday morning, Immunotherapy of Non-small Cell Lung Cancer (NSCLC), features five experts who will focus on the use of immunotherapy in advanced NSCLC. Dr. Herbst will discuss which patients with lung cancer should receive immunotherapy as first-line treatment. He will also address approaches to determine scientifically and with biomarkers how remaining patients should be treated—with chemotherapy or with a combination of chemotherapy and immunotherapy.

David Spiegel, MD, Sarah Cannon Research Institute, Nashville, USA, will discuss combination immunotherapy in NSCLC, with an emphasis on the considerations of our current and future outcomes. "Novel immunotherapy combinations are the focus of much of the current and near-future research. Currently we have limited results with checkpoint inhibitors and CTLA-4 plus PD1/PDL1 combinations and await data from phase II trials," says Dr. Spiegel. He notes that toxicities will be the largest barrier to these regimens. Many other—perhaps more exciting—combinations are on the horizon, he adds.

In the endogenous adaptive immune response to tumors, as well as the induced adaptive immune response to tumors treated with cytotoxic T-lymphocyte-associated antigen 4 (CTLA-4) or PD-1 antagonists, enhancement of such immune reactivity can potentially lead to cancer control and cancer regression in patients with advanced disease.

Dr. Smith explains that NSCLC tumors with differential mutational burden can display regression following checkpoint blockade and suggest that the quality of mutations may be more influential in immunogenicity than the overall quantity of mutations. "Our data also show that MANA reactivity may be the underlying mechanism by which T cells eliminate tumors following anti-PD-1 immunotherapy," Dr. Smith explains. "It is a broader, nonclinical trial population we expect to see more real-world side effects than we see in clinical trials," explains Dr. Spira. All staff—not just the treating oncologist—need to be aware of and monitor for these side effects, especially gastrointestinal and pulmonary events.

Najy Rizvi, MD, Columbia University Medical Center, New York, USA, will discuss his approach to monitoring for checkpoint inhibitor treatment efficacy, and Christoph Zielinski, MD, PhD, Medical University Vienna, Austria, will provide a perspective regarding cost-effectiveness of checkpoint inhibitor treatment and the value of checkpoint inhibitor biomarker testing in improving patient selection for these expensive drugs.

The rapid development of both targeted agents and immunotherapies over the past five years is amazing," says Dr. Herbst. "We are truly at a broader, nonclinical trial population with lung cancer should receive immunotherapy. He will also discuss which patients with lung cancer should receive immunotherapy as first-line treatment. He will also address approaches to determine scientifically and with biomarkers how remaining patients should be treated—with chemotherapy or with a combination of chemotherapy and immunotherapy.

Also speaking will be Luis Paz–Ares, MD, PhD, Hospital Universitario Doce de Octubre, Madrid, Spain, who will address immunotherapy in the second-line setting of advanced NSCLC; Bramimir Sikic, MD, Stanford University, USA, who will focus on new agents, especially programmed death ligand 1 (PDL1) inhibitors as a new immunotherapy target; and Anne-Marie Dingemans, MD, PhD, Maastricht University Medical Center, The Netherlands, who will provide perspective on tobacco use and immunotherapy.

The second session, on Tuesday afternoon, Selection and Monitoring of Patients for Immune Checkpoint Inhibitors, brings together four experts who will focus on one type of immunotherapy, checkpoint inhibitors. An impressive amount of evidence demonstrates the clinical efficacy of these agents. Nevertheless, challenges exist with regard to identifying patients who will derive optimal benefit from checkpoint inhibitor immunotherapy. This session will provide a practical "how-to" for respiratory and medical oncologists interested in implementing this new mode of therapy.

Johan Vansteenkiste, MD, PhD, University Hospital KU Leuven, Belgium, will provide an overview of his approach to patient selection for checkpoint inhibitor immunotherapy. He will introduce a patient-selection algorithm that incorporates a combination of clinical, genetic, and immunologic considerations, as well as availability of and patient eligibility for alternative treatments to define optimal candidates for immunotherapy in daily practice.

Anti-PD-1 Immunotherapy

Continued from page 8

in binding and stability assays. T-cell receptor sequencing was performed on reactive cell cultures and on DNA obtained from tumor resections to match MANA-reactive T-cell receptor clones with clones that were infiltrating the tumor.

Dr. Smith’s findings show that NSCLC tumors with differential mutational burden can display regression following checkpoint blockade and suggest that the quality of mutations may be more influential in immunogenicity than the overall quantity of mutations. "Our data also show that MANA reactivity may be the underlying mechanism by which T cells eliminate tumors following anti-PD-1 immunotherapy," Dr. Smith explains. Mutation-associated antigens represent yet another potential target for cancer immunotherapy. Additional studies should further validate the link between MANA reactivity and clinical response to anti-PD-1.

Staging Manual in Thoracic Oncology

2017 Lung Cancer Meetings

17th Annual Targeted Therapies of the Treatment of Lung Cancer

February 22-25, 2017

Santa Monica, California

Small Cell Lung Cancer Workshop

March 16-17, 2017

New York City, New York

IASLC/ESMO European Lung Cancer Conference 2017

May 5-8, 2017

Garena, Switzerland

IASLC 2017 Chicago Multidisciplinary Symposium in Thoracic Oncology

September 14-17, 2017

Chicago, Illinois

IASLC 18th World Conference on Lung Cancer (WCLC 2017)

October 15-18, 2017

Yokohama, Japan

For more information on IASLC meetings, please visit www.iaslc.org.
Awards Provide Educational Opportunity for Patient Advocates

During today’s IASLC Business Meeting (14:30-15:00; Schubert 2, Level 1), five patient advocates will receive Patient Advocacy Travel Awards. The awards are designed to increase connections with patient advocates and advocacy organizations around the world. The award is open to nonprofit organizations, as well as to individuals not affiliated with an advocacy organization. Awardees receive free conference registration, up to four nights’ accommodation, a travel stipend, and complementary 1-year membership in IASLC.

“These organizations and individuals play a key role in spreading awareness and raising hope, and they often have limited resources,” says Fred R. Hirsch, MD, PhD, CEO of IASLC. “Funding their attendance to the WCLC allows them to further educate their network and other regional advocates about the progress being made in lung cancer research.

All of this year’s recipients—four of whom are lung cancer survivors—emphasize their need to advocate for people with lung cancer who are unable to do so themselves. They are passionate about making their voices heard through involvement with advisory boards and research panels, public awareness campaigns, and government lobbying efforts. Perhaps most importantly, they are dedicated to using their voice to provide hope for other people with lung cancer.

Elizabeth Dessureault, Ottawa, Canada

Elizabeth Dessureault was 26 years old and pregnant with her first child when she was diagnosed with stage IV NSCLC last year. Soon after her diagnosis, she created her blog, www.fromdizzinesslungs.wordpress.com, to share news about her journey with friends and family. The blog has evolved to be a platform to create hope and awareness for others and was named as one of Healthline’s Top 10 Lung Cancer Blogs of 2016. “It has been and always will be my desire to create hope for others,” she says. “When I was initially diagnosed…I was not given any hope, and I never want anyone to have to feel that way. I went from incurable and inoperable to having surgery with a curative intent.” She then launched her “Just Breathe” campaign to raise awareness and funds for lung cancer. The sale of her personally created “just breathe” white leather bracelets brought more than $10,000, which she donated to Lung Cancer Canada, the Ottawa General Hospital’s Molecular Oncology Initiative, and Team Draft. She is thrilled that she was asked to join the board of a newly formed Ottawa base of Lung Cancer Canada.

Ms. Dessureault understands the odds of a lung cancer diagnosis in otherwise healthy young women, and the need to raise awareness of the disease in this population. “According to the Lung Cancer Coalition, in 2012, there were only 90 new cases of lung cancer diagnosed in people between the ages of 15 and 39 years old in Canada. That would make me part of the approximately 0.000002% of young adults diagnosed here in Canada. It is extremely important that our voices are heard as young lung cancer is on the rise.”

Kazuo Hasegawa, Yokohamasi, Japan

Since his diagnosis of stage IV NSCLC in 2010, Kazuo Hasegawa has become a representative of the Japanese Lung Cancer Alliance, a group encompassing the Japanese lung cancer advocacy organizations. He has worked with the Alliance, in collaboration with the Japanese Society of Medical Oncology, to submit petitions to the Japanese Ministry of Health, Labour and Welfare about the high cost of anticancer drugs and the need to accelerate drug development through clinical trials. “In Japan, it is very difficult to find a clinical trial,” he says.

As a television director, Mr. Hasegawa filmed his journey through lung cancer treatment under the theme of “smart patient,” to help promote awareness of the disease and the importance of shared decision-making.

Mr. Hasegawa plans to focus on the patient advocacy program at WCLC 2016. “I want to get the latest information related to advocacy efforts for patients and deepen my knowledge,” he says, adding, “I would like to meet lung cancer patients like me and make a global patient network to be able to share experiences, exchange information, and inspire each other.”

He will share his WCLC 2016 experience in a variety of ways, including his personal Facebook page, as well as the Facebook pages of the Alliance and the Lung Cancer Society, and the website Cancerzent. He would also like to be involved in the planning of the advocacy programing for WCLC 2017 in Yokohama.

Lillian Leigh, Artarmon, Australia

Lillian, the mother of a 3-year-old daughter, was diagnosed with lung cancer just 2 days after her 34th birthday. She has shared her story as a young lung cancer woman in the “Chang- ing the Face of Lung Can- cer” campaign launched by the Lung Foundation Australia. In addition to sharing her story, she was involved in other aspects of this campaign, including organizing support from other groups and arranging for media coverage. She is also assisting the Foundation with a lung cancer advocacy report for Parliament, to increase funding and services for people with lung cancer. Ms. Leigh and her family created her support website (breath.org.au), a website she hopes to use as an advocacy tool to raise awareness about lung cancer in Australia.

“I want to be a source of inspiration for those affected by this terrible disease—whether it’s finding a cure or giving them hope.”

Ike Mills, Maplewood, USA

“I have worked in oncology for my entire professional career – for the first 20 years as a social worker in academic and community oncology centers as well as advocacy organizations,” says Ike Mills. “Coupling this with 5½ years of living with stage IV NSCLC allows me to have the voice, a positive perspective, and the energy to make a difference in lung cancer.”

Ms. Mills works with The Lung Cancer Alliance in Washington, DC, to raise awareness of lung cancer, request re-appropriation of NCI research dollars, and, most recently to support lung cancer research in women. She also serves on the Cancer Support Community’s Cancer Experience Registry lung cancer advisory board and was a patient advocate participant for the Cancer Moonshot Summit, in Washington, DC. She was a panelist for the National Cancer Policy Forum of the National Academy of the Sciences, Washington, DC, Workshop on Implementation of Lung Cancer Screenings and is a member of the Lilly Oncology Advisory Board. “My networking efforts with these organizations and others, such as Patient Power, has led me to many opportunities to educate people with lung cancer, empower them to take an active see Patient Advocates, page 11
Joint IASLC/Global Lung Cancer Coalition Session
Focuses on Advocacy and Communication

The changing state of science and lung cancer is having a substantial effect on advocacy efforts around the world. Tuesday’s joint IASLC/Global Lung Cancer Coalition (GLCC) session will focus on a discussion of the role of communication in advocacy programs. The GLCC is committed to improving disease outcomes for all patients with lung cancer and aims to place lung cancer on the global health care agenda; change public perceptions and lessen the stigma of lung cancer; empower patients to take an active role in their care; and effect change in legislative or regulatory policies to optimize treatment and care. Established in 2001, the GLCC comprises 15 nongovernment patient organizations from countries around the world, including Argentina, Australia, Bulgaria, Canada, Denmark, France, Germany, Ireland, Italy, Japan, Netherlands, Norway, Slovenia, Spain, Sweden, Switzerland, United Kingdom, and United States.

Donal Buggy, Ireland, is Head of Services and Advocacy for the Irish Cancer Society. Mr. Buggy will provide insight into efforts to reduce nationwide tobacco consumption in Ireland and discuss whether achieving a tobacco-free Ireland by 2025 is a realistic goal.

Sarah Winstone, UK, is founding partner of Incisive Health, a policy and communications consultancy headquartered in London. Ms. Winstone will discuss the findings of the first-ever study to benchmark the volume of lung cancer research taking place globally. Result of the study, which was commissioned by the GLCC and carried out by the Institute of Cancer Policy at King’s College, London, were published in the Journal of Thoracic Oncology in July 2016. “The study raises important questions about how, where, and how much we are investing in lung cancer research,” says Ms. Winstone. “We need to invest more, and to make sure that we are researching parts of the patient journey that matter enormously to people with lung cancer – particularly supportive and palliative care,” she adds. As an outcome of the research, the GLCC created a number of resources to help advocates in campaigns, including a global briefing describing the main findings and briefings for each of the countries included in the study to show how their data compare with the overall data.

Jennifer King, PhD, USA, Director of Science and Research, Lung Cancer Alliance, will highlight the need to tailor programs to the changing needs of the community to better serve patients and loved ones. Dr. King will review how an analysis of the Lung Cancer Alliance helpline calls over the past 20 years revealed where service gaps existed and led to the development of new programs. The analysis demonstrated, in particular, the need for more initiatives to help patients and caregivers navigate the ever-changing treatment and clinical trial landscape. “Organizations should be mindful of evolving according to the needs of their community,” notes Dr. King. “For example, our new LungMATCH program takes into account the complexity of the evolving science of lung cancer treatment and brings it to the patient community.”

Kay Bayne, Washington, DC, USA, Director of Marketing, Lung Cancer Alliance, will discuss ways in which advocacy groups can create emotional and engaging content that resonate with the audiences they are trying to reach. The Lung Cancer Alliance’s “How it Feels” campaign is one example. Targeted awareness campaigns focused on programmatic work can be a very successful promotional strategy to increase program utilization. Ms. Bayne will review process and creative considerations when developing such campaigns, as well as metrics to measure success. “To achieve maximum impact when offering lung cancer programs, especially those focused on support for the patient and loved ones, it is critical to have programs across all communication platforms,” explains Ms. Bayne.
Schedule at a Glance: Wednesday

**7:30-8:30**

**WCLC 2016 SCIENTIFIC HIGHLIGHTS**

**SH05:** Chemotherapy, Targeted Therapy and Immunotherapy of Advanced NSCLC  
C1

**SH06:** Radiotherapy, Palliative Care, Regional Aspects  
C7

**MEET THE EXPERT**

**MTE21:** Next Generation Sequencing  
Xuefei Li, China and Ignacio Wistuba, USA  
Schubert 1

**MTE22:** Perspectives in Lung Cancer Imaging  
Thomas Herder, Germany and Georgios Karanikas, Austria  
Schubert 2

**MTE23:** Biomarker Characterization: Challenges and Perspectives  
Leonhard Mülauer, Austria and Rafael Rosell, Spain  
Schubert 3

**MTE24:** Immunohistochemical Assessment of Biomarkers for Immune Checkpoint Inhibitors  
Vera Capelozzi, Brazil  
Schubert 4

**MTE25:** Radiotherapy in Small Cell Lung Cancer  
Cécile Le Pechoux, France and Andrew Turrisi, Germany  
Schubert 5

**MTE26:** EGFR Targeted Therapies: Lessons Learned  
Frederico Cappuzzo, Italy and Shun Lu, China  
Schubert 6

**MTE27:** Treatment of Lung Cancer Patients with Poor Performance Status  
Rogero Lilenbaum, USA and Luboš Petruzelka, Czech Republic  
Lehar 1.2

**MTE28:** Implementation of Precision Medicine in Routine Practice: The Latin American Experience  
Mercedes Dalurzo, Argentina and Maniela Varella-Garcia, USA  
Lehar 3.4

**8:35-9:40**

**PLENARY SESSION**

**PL04a:** Immune Checkpoint Inhibitors in Advanced NSCLC  
Hall D (Plenary Hall)

**9:45-10:15**

**PLENARY KEYNOTE LECTURE**

**PL04b:** The Role of Doctors in a Globalized World  
Hall D (Plenary Hall)

**11:00-12:30**

**EDUCATIONAL SESSIONS**

**ED11:** Advanced NSCLC: State-of-the-Art Treatment  
C8

**ED12:** Regional Tobacco Control Policies: Advances & Challenges  
C7

**ED13:** Treatment of Malignant Pleural Mesothelioma  
C1

**SCIENCE SESSIONS**

**SC24:** Management of Indeterminate Pulmonary Nodules  
C2

**SC25:** The Role of Surgeons in Multimodality Clinical Trials  
Strauss 2

**SC26:** Angiogenesis Inhibition: Advances & Perspectives  
Lehar 3.4

**SC27:** P53 and KRAS Mutations in NSCLC  
Straus 3

**SC28:** Novel Clinical Trial Designs  
Lehar 1.2

**SC29:** Access, Value Assessments and Affordability of Novel Therapies  
Straus 1

**ORAL SESSIONS**

**OA18:** New Insights in the Treatment of Thymic Malignancies  
Schubert 2

**OA19:** Translational Research in Early Stage NSCLC  
Schubert 3

**OA20:** Immunotherapy and Markers  
Stolz 2

**OA21:** Palliative and Supportive Care for Lung Cancer Patients  
Schubert 5

**14:20-15:50**

**ORAL SESSIONS**

**OA22:** Novel Trials and Biomarkers in MPM  
Straus 3

**OA23:** EGFR Targeted Therapies in Advanced NSCLC  
Stolz 2

**OA24:** Radiotherapy of Lung Cancer: Recent Developments  
Stolz 1

**MINI ORAL SESSIONS**

**MA15:** Immunotherapy Prediction  
Schubert 1

**MA16:** Novel Strategies in Targeted Therapy  
Strauss 2

**MA17:** Genetic Drivers  
Lehar 1.2

**14:30-15:45**

**EDUCATIONAL SESSIONS**

**ED14:** Small Cell Lung Cancer  
C2

**ED15:** Thymic Malignancies: Update on Treatment  
C1

**SCIENCE SESSIONS**

**SC30:** Novel Approaches and Regulation in Surgical Education  
C8

**SC31:** Together Against Lung Cancer – A Strategy for Success in the 21st Century  
C7

**NURSES SESSION**

**NU05:** Survivorship  
Schubert 5

**YOUNG INVESTIGATOR SESSION**

**YI02:** Basics of Radio-Oncology  
Straus 1

**16:00-18:00**

**CLOSING PLENARY SESSION**

**PL05:** A Life in Thoracic Oncology – Reflections from Giants on Treatment Advances in Lung Cancer  
C1
IASLC/ASCO Thoracic Oncology Quality and Value Taskforce

Chair: Luis R. Acez, MD

The IASLC partnered with ASCO in 2015 to form the Thoracic Oncology Quality and Value Taskforce. This group is charged with responding to the dramatic changes in health care delivery systems that are occurring both in the United States and around the world. As we transition away from fee for service towards oncology care that is focused on continuous quality measurement and clinical improvement strategies, it is crucial that lung cancer experts play an integral role in defining optimal quality metrics that will be used to reimburse physicians for the care cancer they provide. The National Quality Forum in the United States has identified lung cancer as a key area for quality metric development.

In addition, the high cost of recently approved drugs for thoracic malignancies has heightened the importance of value as a consideration in treatment decisions and has placed lung cancer at the center of emerging and evolving paradigms of care delivery.

The IASLC/ASCO Quality and Value Taskforce is composed of thoracic oncologists from around the world, who are members of both oncology and nursing. The Committee also welcomes and encourages patient advocates to participate in IASLC.

The Taskforce is engaged in reviewing the current practice guidelines for lung cancer and ensuring that quality metrics are up to date and relevant. To this end, the taskforce has evolved rapidly in the past 12 months and has already submitted a number of new quality measures to the existing lung cancer measures that are part of the ASCO Quality Oncology Practice Initiative (QOPI). Multidisciplinary membership within the taskforce is necessary with additional demands to deal with emerging treatment paradigms such as pathway-directed treatments and alternative payment models, such as bundled or episodic payments.

This newly formed IASLC/ASCO Taskforce will continue to lead transformative efforts in the management of lung cancer as we look to enhance the quality of care delivered and to help achieve value-based health care internationally.

IASLC Committee Updates

Membership Committee

Chair: Luis R. Acez, MD

The Membership Committee is a group of 20 volunteer members from different oncology specialties (eg, medical, surgical, nursing, patient advocates) who have the task to grow the association. The Committee meets monthly by teleconference and meets in person during each WCLC.

The Committee has a good tradition and great responsibility because former Committees have increased IASLC membership been able to grow IASLC to the current total of nearly 6,000 members. The Committee includes members from over 100 countries and shares the IASLC vision to be a worldwide organization from whom multidisciplinary providers and research can benefit. Currently, the Committee is considering strategies for increasing the number of members from China, India, and Europe and individuals in the subspecialties of radiation oncology and nursing. The Committee also welcomes and encourages patient advocates to participate in IASLC.

The Committee faces several challenges, such as the fact that many IASLC members come from underdeveloped countries and often cannot afford to join an international medical society. For that reason, IASLC offers a deeply discounted membership for individuals from underdeveloped countries, doctors in training, and fellows. Another challenge is the fact that most institutions do not provide support for nurses, allied health professionals or physicians in training to participate in live oncology meetings.

Another charge of the Committee is to promote the great benefits that oncology professionals can get from joining IASLC. Many members are unfamiliar with the wide range of educational opportunities the Association provides, including the Journal of Thoracic Oncology, which has a great impact factor, as well as several publications, webinars and live meetings.

Recently, the IASLC School of Oncology has been a great benefit because it has begun to take the best lung cancer knowledge and experts to underdeveloped nations where young physicians are trained.

Avastin NSCLC: efficacy beyond chemotherapy

Reference


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What do you like about the WCLC 2016 Daily News?

Neethu Sreenivasan, MSc, Bangalore, India

“It had a few brief outlines and I saw the picture of the president on the front...and there was a story about mesothelioma, which is a disease that I am interested in following but not in actually treating. I opened the paper on the inside and I saw a picture of the executive chairman. It was good to have something in my hand. There was also a bunch of advertising, and I have a problem with advertising in there, but actually I don’t remember one of them! It was colorful, it was easy, and it was short, so I really breezed through it when I was having a little something to eat at lunchtime.”

Andrew Turrisi, MD, Michigan, USA

“All of the things that I read, and the clearness, and the precision in which the topics are described.”

Guilia Mazzaschi, MD, Parma, Italy

“It gives me a brief summary of what has happened and I can quickly skim through and also see what is happening later. It helps to prioritize my day.”

Juhinagar Nagar, MSc, Bangalore, India

“It is convenient to have someone else provide a daily concise summary and then I can find it very easy to understand what I have missed in a previous day because I can obviously not attend all of the lectures.”

Amir Onn, MD, Tel Aviv, Israel

“First off, the paper is a very good idea and I haven’t seen it before. It is up to date and gives a good hint about what to see the next day and how the sessions are running. It’s perfect.”

Johannes Lauer-Herrnfliese, MD, Hamburg, Germany

“By reading the paper, we can know a lot of things about the conference and even something about the topics you are not able to go to because there are a lot of parallel sessions and it is impossible to go to all of them. So, for me as a surgeon it was very interesting reading the paper because I can choose the topics I will try to attend.”

Paulo de Biasi Cordeiro, MD, Rio de Janeiro, Brazil

“It is good. But the highlights of the last day are missing a little bit...but maybe that was because the presidential symposium is tomorrow so maybe then it will be bigger.”

Bianca Raidl, MD in training, Salzburg, Austria
Join us at the IASLC Booth in the Exhibit Hall

LEARN MORE ABOUT

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October 15–18, 2017 | Yokohama, Japan

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