

2nd European Multidisciplinary Conference in Thoracic Oncology (EMCTO)

24 - 26 February, 2011

Lugano, Switzerland

TAKE-HOME MESSAGES

- A long-awaited TITAN study did not demonstrate superiority of erlotinib over chemotherapy in the second-line treatment of advanced NSCLC patients with poor prognosis
- Oncogene AEG-1 shows potentials in predicting response to erlotinib in EGFR-mutant NSCLC
- Radioguided, video-assisted thoracic surgery could be useful in the localization of non-palpable solitary pulmonary nodules
- Immunohistochemistry can not substitute yet fluorescent in situ hybridization in ALK testing
- First observation of antiangiogenic effect of zoledronic acid in patients with bone metastases from NSCLC

INTRODUCTION

Sunny with blue skies, Lugano greeted attendees to the European Multidisciplinary Conference in Thoracic Oncology (EMCTO), where oncology and respiratory specialists discussed on modalities for better treating lung cancer and other thoracic malignancies. EMCTO included a range of educational and sessions designed to promote a high level of interactivity between speakers and an actively involved audience. Presentations were based on state-of-the-art reviews, real patient case reports and scientific reports of new research. Indeed, while new research results were a big attraction for attendees to the meeting, important presentations and discussions focused on the first public presentation of the Lugano Consensus among experts on non-small cell lung cancer (NSCLC) and small cell lung cancer (SCLC) diagnosis and therapy. In fact, the presentation of the Consensus material was emphasized by Dr. Rolf Stahel, one of the Conference Chairs, as one of the key elements of this multidisciplinary conference. Specialists from many disciplines dealing with lung and other thoracic malignancies, including medical oncologists, radiotherapists, thoracic surgeons, pathologists, and pulmologists from across Europe and beyond, met to sustain interdisciplinary discussions on current standards of care and new milestones, with the aim of translating new

information into clinical practice and better management of patients with thoracic tumors.

A detailed description of the Consensus reports and discussions would fall beyond the scope of this report, but important messages to remember are the emphasis on mixed-modality strategies combined, although important factors for improving patients outcome in early and locally advanced NSCLC include the availability/experience of modern diagnostic tools and treatments and collaboration within multidisciplinary team. Individualized treatment should be based on stage, prognostic factors and comorbidities [Eberhardt, W. et al., [Abst 2IN](#)]. Detailed recommendations, indicating type of the first-line therapy, in patients with advanced NSCLC were provided based on histology, performance status, presence of symptoms, comorbidities, age of patients, and presence of activating mutations (Table I). The recommendations on maintenance therapy were provided as well [Gridelli, C. et al., [Abst 4IN](#)]. Decisions on the treatment in second and third line and factors that should be taken into account were further discussed. The lack of differences in progression-free survival (PFS) and toxicity in patients aged under and over 70 years in two recent retrospective studies was emphasized [Baas, P., [Abstr 3IN](#)]. Detailed recommendations were provided on pathology and molecular testing for NSCLC, including validated markers for subtyping (TTF-1, p63, CK5/6). Epidermal growth factor receptor (EGFR) mutations testing should be routinely performed to identify advanced NSCLC patients eligible for first-line treatment with EGFR tyrosine kinase inhibitors (TKIs) [O'Byrne, K. et al., [Abst 5IN](#)]. In addition, consensus on SCLC focused on the need for tumor, node and metastasis (TNM) staging to guide therapy. After a negative mediastinal exploration, surgical candidates should receive post-operative chemotherapy and also radiotherapy to mediastinum in case of N1 or unforeseen N2 involvement. Platinum/etoposide remains the standard chemotherapy, but irinotecan may substitute etoposide in patients with metastatic disease. Concomitant thoracic radiotherapy should be a part of first-line therapy for M0 patients, and 3D conformal radiotherapy is recommended. The Lugano Consensus recommended prophylactic cranial irradiation for all patients with SCLC and treatment-induced tumor reduction, although the possible neurocognitive risks in elderly patients should be emphasized in the decision process [Le Pechoux, C. et al., [Abst 6IN](#)].

Table I. Extract recommendations for first-line therapy for NSCLC according to the ESMO Lugano Consensus [Gridelli, C. et al., [Abst 4IN](#)].

Drugs	Recommendations
-------	-----------------

Platinum-based	<p>Cisplatin should be used in fit PS 0-1 patients with adequate organ functions</p> <p>In PS2 patients either single agent or platinum-based combinations are valid options</p> <p>Platinum-based chemotherapy is preferred in fit elderly PS 0-1 patients and adequate organ functions and single-agent is preferred in unfit elderly patients</p> <p>There is no a standard platinum-based doublet; cisplatin/pemetrexed has shown to be superior for nonsquamous tumors and cisplatin/gemcitabine for tumors with squamous histology</p>
Pemetrexed	Switch maintenance therapy
EGFR tyrosine kinase inhibitors	<p>Based on histology, type and response to first-line chemotherapy, residual toxicity, symptoms</p> <p>The preferred first-line treatment in patients with tumor harbouring an activating EGFR mutation is an EGFR tyrosine kinase inhibitor</p> <p>Erlotinib also as switch maintenance therapy is an option</p> <p>Activating EGFR mutations mandate tyrosine kinase inhibitor maintenance therapy, if not yet received</p> <p>Tyrosine kinase inhibitor therapy also for patients with symptomatic brain metastases following local treatment</p>
Bevacizumab with platinum-based chemotherapy)	Particularly with paclitaxel/carboplatin for nonsquamous NSCLC

Cetuximab added to platinum-based chemotherapy	Particularly for EGFR IHC-positive tumors in combination with cisplatin and vinorelbine
--	---

However, besides discussing the Lugano Consensus, some of new research results were reported and discussed during EMCTO 2011, as summarized in the following report.

NON-SMALL CELL LUNG CANCER

Diagnosis

An educational session on Diagnostics in Lung Cancer attracted the interest of the attendees because of discussions on how pathology can deliver data even when only small samples of tissue are available, although novel and more refined tests are challenging the situation, with the need for more and more tissue for providing a full diagnostic profile [Kerr, K.M., [Abst 7IN](#)]. However, circulating tumor cells could also be a source of DNA and their potentials as a surrogate for tissue samples were discussed in certain cases [Blackhall, F., [Abst 9IN](#)]. Novel diagnostic tools, along with efforts into building a biobank for molecular research, such as the LUNGSCAPE project [Taron, M. et al., [Abst 10IN](#)], have potential for improving the molecular diagnosis of NSCLC in the future.

Data from the NELSON trial from The Netherlands and Belgium positively assessed that screening with software measuring volumetry may substantially reduce the number of recall computed tomography (CT) scans and the rates of false-positive tests. The study investigators also demonstrated that CT screening has no relevant impact on quality of life (QoL) and that 15% of the screening and control arm participants quit smoking. There is so far no definitive data on the real effectiveness of low-dose CT screening, which is currently being analyzed in six randomized trials across Europe [van Klaveren, R.J., [Abst 15IN](#)]. However, the issue with screening is what to do in case of incidental lung nodules, and which contextual factors that determine the risk, including age, tobacco smoking, prior history, presence of symptoms, and also the opacity, size, morphology, density, location and presence of calcification of the nodule as seen on the scans, should guide the decisions by probabilistic determinations [Sculier, J., [Abst 16IN](#)].

Besides diagnosis, imaging helps monitor therapy and assess outcomes, in which regard data were discussed on the usefulness of positron emission tomography (PET)-CT at least 3 months after radiotherapy, as thoracic CT scans have poor discriminative potential for distinguishing between tumor recurrences and post-treatment morphological changes [Westeel, V., [Abst 17IN](#)]. Other alternatives, notably molecular screening and breath analysis, could turn out to be of use in the future, and favorable initial results were described with the use of specific miRNA signatures in

plasma, but these remain experimental [Sozzi, G., [Abst 18IN](#)].

Pathology

The main innovations in a tentatively proposed IASLC/ATS/ERS classification of lung adenocarcinoma are the substitution of adenocarcinoma in situ for bronchoalveolar carcinoma, the suppression of mixed-subtype adenocarcinoma and the inclusion of a minimally invasive adenocarcinoma for small, solitary, tumors with an invasive area of less than 5 mm, that have been related to a 100% 5-year survival. Mucinous bronchoalveolar adenocarcinoma are now called mucinous adenocarcinoma. The subclassification will evolve to include biomarkers and gene mutations and copy number to facilitate diagnosis and recommend potential specific therapies [Brambilla, E., [Abst 8IN](#)].

Tumor Staging

It has been discussed on how concise staging with improved diagnostic tools should be applied to resectable lung tumors accompanied by suspect isolated lymph node or distant metastases [Mueller, M.R., [Abst 11IN](#); Doods, C., [Abst 12IN](#); Thomas, M., [Abst 13IN](#)]. A study presented in the poster form showed that PET-CT alone could be highly accurately used as a clinical staging tool in early-stage lung cancer, without the need for invasive procedures [Levy Faber, D. et al., [Abst 65P](#)].

Biomarkers

Recognizing the need for biomarker-driven trials in subgroups of patients with molecularly defined lung tumors and the need for extensive collaboration between clinical and laboratory sites, the LUNGSCAPE project was initiated by the European Thoracic Oncology Platform, as described during one of the keynote lectures presented at the meeting in Lugano. The LUNGSCAPE program will aim at establishing a virtual biobank for molecular mapping of tumors linked to clinical, demographic and outcome data using retrospective resected lung cancer samples and the corresponding patient data as starting points [Stahel, R.A., [Abst 1IN](#)].

Some of new studies have started to offer information on specific types of tumors and optimal therapies. As an example, markers related to DNA repair pathways, such as DNA excision repair protein ERCC-1, DNA mismatch repair protein Msh2, and breast cancer type 1 susceptibility protein (BRCA1) expression, have been related to cisplatin resistance, whereas p27, class III b-tubulin and thymidylate synthase expression have been related to chemotherapy benefit. In the setting of targeted therapies, EGFR kinase domain mutations have been related to improved response to tyrosine kinase inhibitors, whereas mutations of GTPase KRas or c-Met amplification have been related to resistance to erlotinib. In addition, latest research has suggested the EML4/ALK fusion

protein as a good candidate for anaplastic lymphoma kinase (ALK) tyrosine-protein kinase inhibitors [Besse, B., [Abst 24IN](#)]. The use of immunohistochemistry (IHC) with an anti-ALK monoclonal antibody arose as a practical, quick and easy tool for ALK status screening when combined with confirmatory testing. In fact, the results of a study in 303 lung adenocarcinoma samples from nonsmoking patients documented younger age with less well-differentiated grade in all ALK-positive compared to ALK-negative tumors, which translated into markedly shorter event-free survival in the ALK-positive group of patients. At the present time, there are no guidelines or standard protocols for ALK testing by IHC. Study researchers reported that only samples scored with the intermediate IHC scores of 1+ and 2+ would need confirmatory testing with fluorescence in situ hybridization (FISH); however the study discussant pointed out that at present IHC cannot yet substitute FISH in patients with ICH 3+ score. The results also demonstrated a strong correlation between the ALK status and tumor differentiation grade and stage and patient survival [Yang, P. et al., [Abst 47PD](#)].

Spanish researchers applied innovative nanostring technology based on single nuclear reaction to address why, despite presence of EGFR gene mutation, response rate and duration of response to the treatment with erlotinib are heterogeneous. They have discovered that AEG-1, a gene that activates several molecular pathways implicated in drug resistance, is a strong predictor of progression-free survival. The nanostring technology is considered innovative compared to PCR- and array techniques and a prospective validation study is needed for translation of this important finding to the clinic [Rosell, R. et al., [Abst 58PD](#)] (Fig. 1).

Few other, small biomarker-associated studies were presented or discussed during the EMCTO Conference, however none of them showed potentials for transferring into everyday clinical work yet. ERCC-1 overexpression in tumors and surrounding tissues was associated with poorly differentiated histology, suggesting a role in carcinogenesis and putative use as a biomarker [Koutsami, M. et al., [Abst 48PD](#)]; granulocyte colony-stimulating factor (G-CSF) produced by lung cancer tissue was also revealed as a poor prognosis indicator [Matsuda, E. et al., [Abst 62P](#)]. Additional putative biomarkers currently under investigation as indicators of specific targeted therapy for NSCLC include the tyrosine-protein kinase ROS and gene variability in the platelet-derived growth factor receptor (PDGF-R-a) and the tyrosine-protein kinase Kit, which should be further characterized in the future [Mitsudomi, T., [Abst 39IN](#)]. In addition, fibrin and fibrin degradation products have been suggested as adjuvant assays for early detection of lung cancer [Motamed-Khorasani, A. et al., [Abst 53P](#)], whereas the glucose-corrected maximum standardized uptake value of FDG was suggested as an indicator of risk for early recurrence after complete resection of early-stage NSCLC [Konings, R. et al., [Abst 77P](#)].

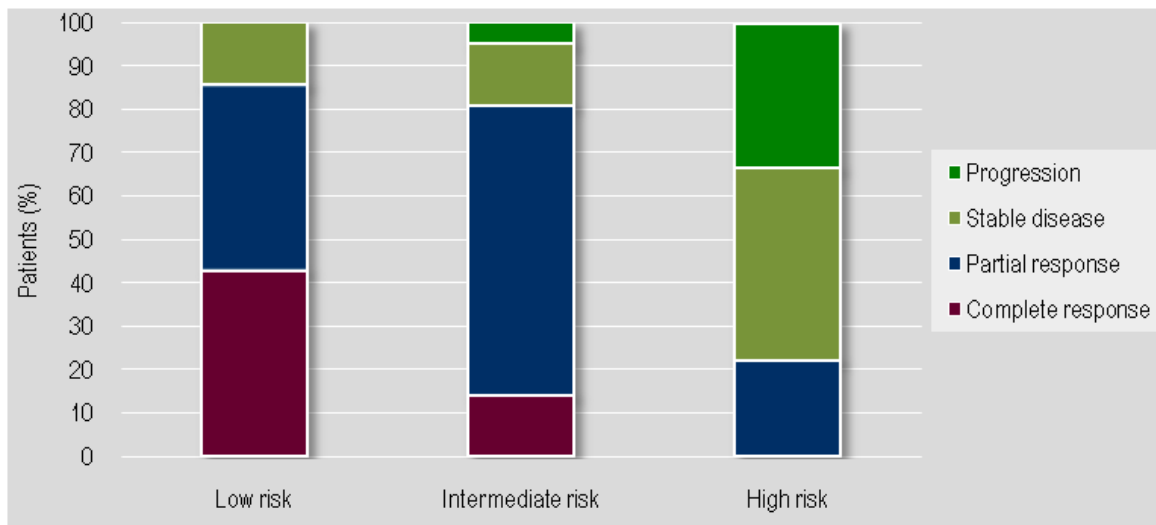


Fig. 1. Response rates to erlotinib in patients with low-, intermediate- or high-risk NSCLC according to AEG-1 and BRCA1 expression levels [Rosell, R. et al., [Abst 58PD](#)].

Treatment

Specific details on different treatment options discussed during EMCTO 2011 are reviewed in this chapter.

Medical therapy

According to a meta-analysis of large randomized trials using cisplatin-based dual chemotherapy, adjuvant chemotherapy improves overall survival (OS) and disease-free survival (DFS) after complete resection of stage II and III NSCLC. Non-significant benefits in stage IA tumors indicate the need for intensified research and identification of patients who are candidates for adjuvant chemotherapy [Eberhardt, W., [Abst 21IN](#)]. Higher survival rates were observed in stage IB but the data were not statistically significant due to the small number of patients in this subgroup.

Specific research presented during the meeting in Lugano on the use of chemotherapy for stage IIIB NSCLC revealed a lower risk for brain metastases and longer survival using concurrent cisplatin- plus docetaxel- or vinorelbine-based chemoradiotherapy followed by maintenance chemotherapy compared to induction chemotherapy alone [Pehlivan, B. et al., [Abst 81PD](#)]. A similarly designed study indicated the benefit of concurrent cisplatin-based chemoradiotherapy compared to palliative radiotherapy alone, with respective OS rates of 28.6% and 3.6% [Dzhugashvili, M. et al., [Abst 84P](#)].

Selecting specific therapy for patients with NSCLC depends on a number of factors and is evolving into a biomarker-guided personalized medicine, as already discussed in the section of biomarkers in this report. However, the best established marker at present include mutated EGFR, as already discussed, and EGFR testing has been, so far, the first step for selecting patients candidates for

highly effective molecular treatment. It might be of interest for future diagnostic algorithms that the presence of an activating EGFR mutation and the presence of an ALK/EML4 gene arrangement seem to exclude each other [Reck, M., [Abst 37IN](#)].

The results of the TITAN study, a very important phase III trial in pretreated patients with advanced NSCLC, were reported at this year's meeting. TITAN included 424 patients whose tumors rapidly progressed after up to 4 cycles of platinum-based doublet chemotherapy. Then they have been randomized to treatment with erlotinib at a dose of 150 mg/day or chemotherapy with docetaxel or pemetrexed until progression or toxicity. No significant differences in OS or PFS and objective response rates were apparent comparing erlotinib to cytotoxic therapy, with consistent results across subgroups of patients based on stage, performance status, race, gender, histology and smoking status. However, patients with confirmed wild-type EGFR showed a trend towards improved OS if treated with erlotinib. The results of the TITAN study confirmed the equivalent efficacy of erlotinib compared to chemotherapy as second-line therapy for patients with advanced NSCLC, even in poor-prognosis patients who rapidly progressed on first-line platinum-based therapy [Ciuleanu, T. et al., [Abt 88PD](#)] (Fig. 2). However, the study was designed to show superiority of erlotinib in this setting, and therefore it did not reach the primary endpoint. Additional studies with erlotinib included a retrospective analysis that confirmed its effectiveness at a reduced dose of 150 mg every other day in unselected patients who developed high-grade toxicity with the standard 150 mg/day doses [Passaro, A. et al., [Abst 89PD](#)].

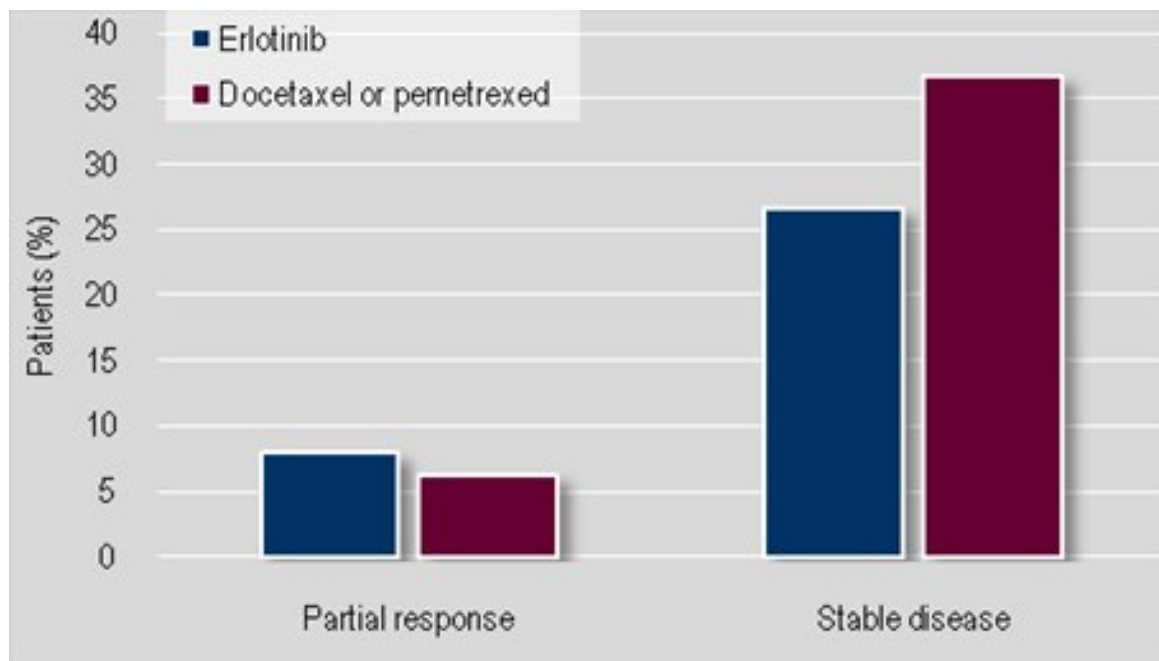


Fig. 2. Partial response and stable disease rates (no complete responses were observed) in patients receiving erlotinib or chemotherapy with docetaxel or pemetrexed [Ciuleanu, T. et al., [Abst 88P](#)].

A meta-analysis indicated gefitinib's potential for improving PFS and objective response rates at a lower risk for adverse events such as anemia and neutropenia compared to several chemotherapy regimens when used as first-line therapy for EGFR-positive NSCLC [Verduyn, S.C. et al., [Abst 90PD](#)]. Observations from an expanded-access program with gefitinib in Switzerland confirmed the good tolerability of and long-lasting control of NSCLC attained in patients with advanced disease, including smokers and patients with wild-type EGFR [Gautschi, O. et al., [Abst 92PD](#)].

A study reported in 41 patients revealed for the first time a direct antiangiogenic effect of zoledronic acid in bone metastases from NSCLC. Treatment with this bisphosphonate at the standard dose of 4 mg resulted in significant reductions of vascular endothelial growth factor (VEGF) and basic fibroblast growth factor (bFGF) levels, but not PDGF and hepatocyte growth factor (HGF) levels within 48 hours. If confirmed in larger controlled studies, these results could lead to testing of zoledronate in the adjuvant treatment for NSCLC, as currently being investigated in breast cancer [Quirino, M. et al., [Abst 60PD](#)] (Fig. 3).

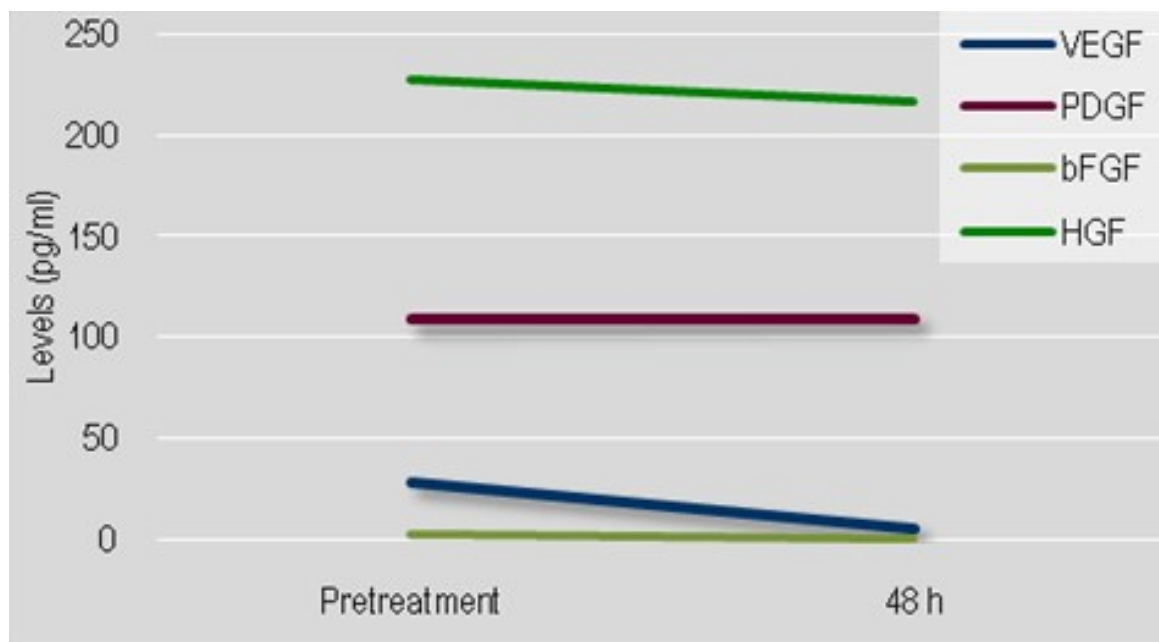


Fig. 3. Vascular endothelial growth factor (VEGF), platelet-derived growth factor (PDGF), basic fibroblast growth factor (bFGF) and hepatocyte growth factor (HGF) levels at baseline and 48 hours after dosing with zoledronate [Quirino, M. et al., [Abst 60PD](#)].

An interesting report from a retrospective study including 92 patients with stage III disease undergoing radiotherapy suggested no untoward effect for oral glutamine supplementation on the tumor cells, but revealed a non-significant survival benefit that could be potentially further investigated for the possibility of a radiosensitizing effect [Topkan, E. et al., [Abst 87P](#)].

Radiotherapy

According to the experts, radiotherapy has an essential role in the treatment of stage I-III NSCLC, with technical improvements evolving towards stereotactic radiotherapy, although with challenges in the case of central tumors. However, discussions continue on the optimal doses and fractionation schedules, and the risks and toxicity associated with this particular form of radiotherapy, especially in patients who could be candidates for surgery. Nevertheless, stereotactic radiotherapy is becoming increasingly available in Europe, and has had a notable impact on lung cancer mortality, at least in patients with stage I NSCLC [Dziadziuszko, R. et al., [Abst 20IN](#)]. Furthermore, the use of stereotactic radiotherapy is challenged by the identification of suitable patients and optimal doses and fractionation schedules, and uncertainties on the risk of developing new pulmonary lesions, especially when used for treating pulmonary oligometastases [Lagerwaard, F.J., [Abst 28IN](#)]. Specific research in the area was exemplified by studies demonstrating the feasibility of stereotactic radiotherapy, resulting in excellent tumor control with a low risk for toxicity in a series of 34 patients [Beltramo, G. et al., [Abst 73PD](#)]. In an additional study, stereotactic body irradiation was well tolerated, with good local control rates in patients with T1-2 NSCLC [Marcenaro, M. et al., [Abst 74P](#)], whereas in a third study in inoperable patients with single T1,2N0M0 lung tumors, stereotactic radiotherapy resulted in local control rates similar to those previously reported in other studies, but with a lower risk for toxicity [Bibault, J. et al., [Abst 75P](#)]. The results of a further study using stereotactic radiotherapy for treating pulmonary metastases confirmed the promising role of the technique, which resulted in high local control rates among 27 patients, with a low toxicity profile over a median follow-up of 13 months [Beltramo, G. et al., [Abst 91PD](#)]. In this section on novel radiotherapy techniques, it is worth mentioning that an additional study using helical tomotherapy with adjuvant platinum-based chemotherapy also demonstrated good local control in inoperable stage IIIA/B NSCLC [Cianciulli, M. et al., [Abst 85P](#)]. As a possible alternative for the future, radiofrequency ablation for pulmonary metastases offered surprisingly good OS according to the results of a 3-year open-label follow-up of 46 patients with oligometastatic lung disease, with a very low risk of morbidity [Klomp, H.M., [Abst 29IN](#)]. However, none of presented studies was enough powered to translate conclusions into routine practice.

As described during an educational session on Emerging Topics and Ongoing Research in Early NSCLC, in addition to many of the contributions which are reviewed in the pertinent sections of this report, another advance in the improved use of radiotherapy was the identification of intratumoral heterogeneity through FDG-based PET/CT, indicating variable chemoradiosensitivity and the need for higher or lower doses, thus helping balance the needs with the risk of toxicity to organs at risk within the mediastinum [De Ruyscher, D., [Abst 22IN](#)].

Surgery

As emphasized during the Lugano Consensus discussions, surgery remains a valid option for the treatment of fit candidates with NSCLC with provided adequate diagnosis and staging if correct

imaging explorations are used.

Lobectomy with radical lymphadenectomy as required was the most widely performed surgical therapy for stage IB-IIIa NSCLC in the MAGRIT trial, currently ongoing to assess the potential of a melanoma-associated antigen 3-specific cancer immunotherapy as adjuvant treatment [Zielinski, M. et al., [Abst 72PD](#)]. However, early complications remain a concern after pneumonectomy for NSCLC because of the association with increased mortality, requiring special care in patients with advanced age, heart disease or other high-risk characteristics [Alloubi, I. et al., [Abst 78PD](#)]. Surgery alone did not render a survival benefit over chemoradiotherapy, as noted in a series of 72 N2 NSCLC patients receiving cisplatin-based induction chemotherapy followed by cisplatin/paclitaxel chemoradiotherapy or surgical therapy preceded by induction and/or followed by adjuvant chemotherapy [Bosch-Barrera, J. et al., [Abst 79PD](#)] (Fig. 4).

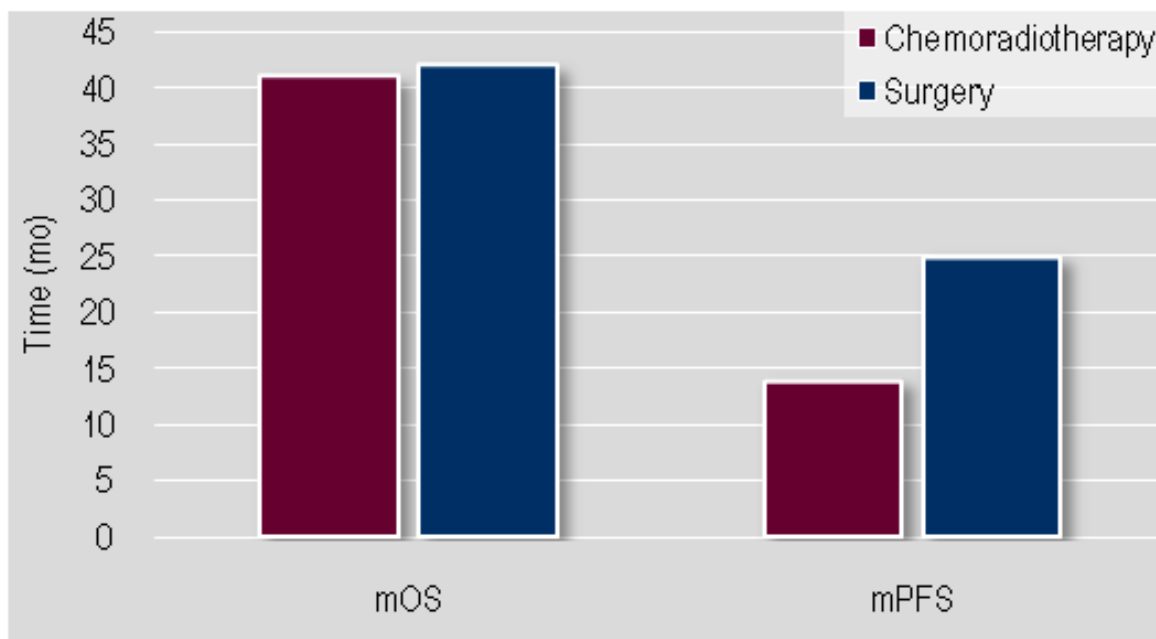


Fig. 4. Median overall survival (mOS) and progression-free survival (mPFS) in patients with N2 NSCLC receiving chemoradiotherapy or surgical therapy [Mosch-Barrera, J. et al., [Abst 79PD](#)].

Research into improved surgical techniques for lung cancer has resulted in video-assisted minimally invasive lobectomy as a strategy of care for early-stage cancer in selected centers, with the possibility of expanding into standard therapy across Europe [Hansen, H.J., [Abst 25IN](#)]. In this regard, a study in 19 patients with solitary nonpalpable pulmonary nodules of less than 15 mm in diameter placed 20-40 mm away from the nearest pleural surface and/or of posterior location confirmed the feasibility of radioguided thoracic surgery using a solution of [99mTc]-labeled human albumin microspheres in a nonionic contrast medium to guide the surgeons while removing potentially cancerous tissue. The nodules were adequately localized in all patients, and frozen sections taken to identify eight cases of primary and four cases of secondary lung cancer. Wedge resection through standard lobectomy with

systematic lymphadenectomy as required after pathological examination of resected experiments was feasible in all patients with primitive lung cancer without intra- or postoperative complications. Radio-guided surgery permitted the localization of small, deep, nonsolid lung nodules that would be difficult to localize with video-assisted thoracoscopic surgery and would not be identified by direct finger palpation during surgery [Bertolaccini, L. et al., [Abst 71PD](#)]. The technique appears to be a simple and safe innovative procedure, but currently only few clinical facilities are equipped with that technology.

SMALL CELL LUNG CANCER

In a retrospective review of 125 patients with poor initial performance status and limited-stage SCLC, comparing of concurrent and sequential chemoradiotherapy didn't show differences in OS, PFS, and objective or complete response rates [Manapov, F. et al., [Abst 68PD](#)] (Fig. 5); according to additional analysis, responses in primary thoracic disease correlated with brain metastasis-free survival [Manapov, F. et al., [Abst 69PD](#)]. Lymphatic invasion, D2-40 reactivity (targeting an O-linked sialoglycoprotein found in lymphatic vessel endothelium) and lymphatic vessel endothelial hyaluronic acid receptor 1 (LYVE-1) expression were evaluated as markers of poor prognosis in patients with SCLC [Hardavella, G. et al., [Abst 50P](#)].

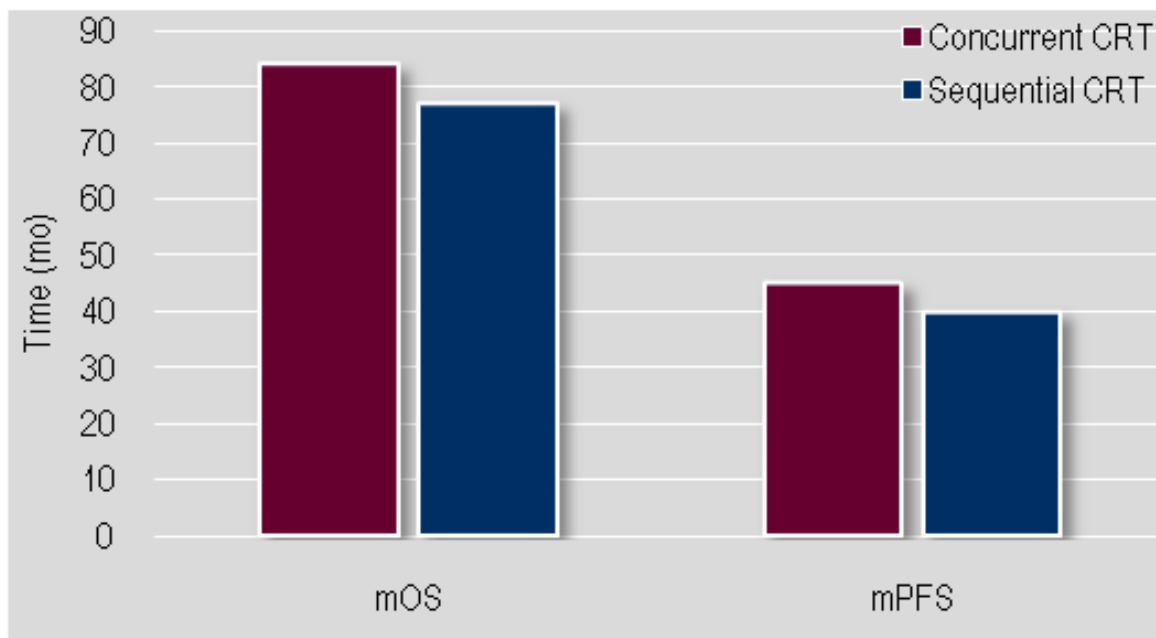


Fig. 5. Median overall survival (mOS) and progression-free survival (mPFS) in patients with SCLC receiving concurrent or sequential chemoradiotherapy (CRT) [Manapov, F. et al., [Abst 68PD](#)].

OTHER THORACIC TUMORS

Information and views were also exchanged on the pathology and surgical and nonsurgical therapy for thymoma. As a brief summary, surgery was concluded to be the basis in the treatment of thymoma [Ruffini, E. et al., [Abst 31IN](#)], although the indolent nature of these tumors may suggest a role for chemotherapy in patients with advanced disease. However, the current lack of reliable evidence should be noted as all the results are from small phase II trials [Daugaard, G., [Abst 32IN](#)].

Local and systemic therapies were also discussed for neuroendocrine tumors (information on SCLC is already detailed in the corresponding section of this report). In these tumors, surgery alone was not deemed sufficient, calling for multimodality therapies including chemo- or chemoradiotherapy, somatostatin analogues (notably octreotide), targeted agents (such as bevacizumab, sunitinib, cediranib, vandetanib and everolimus) and additional currently experimental agents, all of which remain at present poorly documented as evidence-based therapies for such tumors [Stamatis, G., [Abst 34IN](#); Früh, M., [Abst 35IN](#)]. Among established therapies, a comparative retrospective study indicated superiority for platinum- compared to anthracycline-based chemotherapy [Martinez-Martinez, G. et al., [Abst 93P](#)].

Regarding malignant pleural mesothelioma, second-line chemotherapy was suggested to be beneficial for improving OS in patients with non-resectable tumors, especially in patients with epithelial tumors [Cedr s-P rez, S.M. et al., [Abst 96PD](#)]. A three-dimensional conformal radiotherapy based on seven conformal fields with an isocenter in the homolateral lung was described to allow a reduction of joint fields with a better dose distribution, resulting in less toxicity compared to the standard intensity-modulated conformational radiotherapy [Pendicini, P. et al., [Abst 97P](#)].

The EMCTO is organized in partnership between the European Society for Medical Oncology (ESMO), the European Society for Therapeutic Radiology and Oncology (ESTRO), the European Society of Thoracic Surgeons (ESTS) and the European Respiratory Society (ERS).

RELATED INFORMATION

Click [here](#) to access the meeting abstracts page.

Click [here](#) to access the meeting webcasts page.

Save the date: The 3rd European Lung Cancer Conference (ELCC) will be held in Geneva, Switzerland, April 18-21, 2012.

AFFILIATION AND DISCLOSURE

The report is provided by Xavier Rabasseda, MD, Thomson Reuters, Barcelona, Spain. The author is a full-time employee of TR and have no conflict of interest to disclose.

Copyright © 2011 Prous Science, S.A.U. or its licensors. All rights reserved.