The European Thoracic Oncology Platform

Vienna, September 28, 2012
Background

• The interest in promoting and improving collaboration in clinical and translational research in lung cancer and mesothelioma in Europe prompted investigators representing collaborative study groups and institutions concerned with thoracic malignancies to explore new ways of working together.

• Out of this discussion the European Thoracic Oncology Platform was founded in 2009
Vision

Over thirty individual research groups and trial institutions doing their best

Groups working together:

- Establishing research priorities
- Combining resources and expertise in a modular system
- Accelerate accrual
- Foster translational research
- Integrate younger investigators
- Help to preserve academic independence
The European Thoracic Oncology Platform (ETOP) is a foundation with the purpose to promote exchange and research in the field of thoracic malignancies in Europe. It is a non-profit organisation with its legal seat in Bern, Switzerland.

* Approved by Swiss authorities May 2009
Specific aims of ETOP according to bylaws*

- To serve as a meeting platform for European study groups and institutions dealing with thoracic malignancies
- To foster intergroup studies among, but not exclusively, European study groups and institutions
- To sponsor and/or perform own studies
- To foster scientific exchange on laboratory and clinical issues among interested parties and beyond
- To provide knowledge to partners in the field

* Approved by Swiss authorities May 2009
Members of the foundation Council

- Rolf Stahel, Switzerland, Medical Oncology (President)
- Paul Baas, The Netherlands, Pulmonology
- Ken O’Byrne, Ireland, Medical Oncology
- Cesare Gridelli, Italy, Medical Oncology
- Rafael Rosell, Spain, Medical Oncology
- Suresh Senan, The Netherlands, Radiotherapy
- Walter Weder, Switzerland, Thoracic Surgery
Participants

Austria
- CECOG – Central European Cooperative Oncology Group
- Translational Thoracic Oncology Lab

Belgium
- ELCWP – European Lung Cancer Working Party
- EORTC Lung Cancer
- Leuven Lung Cancer Group
- TOGA – Thoracale Oncologie Groep Antwerpen

Czech Republic
- Czech Lung Cancer Cooperative Group

Denmark
- DLCG – Danish Lung Cancer Group
- DOLG – Danish Oncological Lungcancer Group

France
- GFPC – Groupe Français de Pneumo-Cancérologie
- ICO – Integrated Centers of Oncology
- IFCT – Intergroupe francophone de Cancérologie thoracique
- IGR – Institut Gustave Roussy

Germany
- AOT – Arbeitsgemeinschaft Onkologische Thoraxchirurgie
- Arbeitsgruppe Thorakale Onkologie der Arbeitsgemeinschaft Internistische Onkologie der Deutschen Krebsgesellschaft

Greece
- HeCOG – Hellenic Co-operative Oncology Group
- HORG – Hellenic Oncology Research Group
- Oncology Unit GPP, Athens School of Medicine

Hungary
- Thoracic Oncology Program

Italy
- AIOT – Associazione Italiana di Oncologia Toracica
- GIMe – Italian group for the research and therapy of Mesothelioma

Israel
- Tel-Aviv Medical Center

Poland
- Polish Lung Cancer Group
- Medical University of Gdansk TOP Group

Portugal
- GECP – Grupo de estudos do cancro do pulmão

Spain
- SLCG – Spanish Lung Cancer Group
- CIBERES – Biomedical Research Center on Respiratory Diseases

Sweden
- Swedish Lung Cancer Study Group

Switzerland
- SAKK – Schweizerische Arbeitsgemeinschaft fuer Klinische Krebsforschung

The Netherlands
- NVALT – Nederlandse Vereniging van Artsen voor Longziekten en Tuberculose

United Kingdom/Ireland
- Birmingham Group
- BTTOG – British Thoracic Oncology Group
- ICORG – All Ireland Cooperative Oncology Research Group
- London Lung Cancer Group
- Manchester Lung Cancer Group
- National Cancer Research Institute – Lung Cancer Clinical Study Group

Outside of Europe:
- U.S.A. - Roswell Park Cancer Institute
- China – Shanghai Chest Hospital

Participants
Achievements 2011/2012

• ETOP web platform expansion
  ✓ Free access to “Lung Cancer”
  ✓ Scientific news with updated articles
  ✓ Events
  ✓ Slide sets (ASCO, WCLC, ECCO-ESMO)

✓ EGFR WIKI
ETOP Meeting in Dublin 2012

The next ETOP meeting will be held at The Burlington Hotel in Dublin, Ireland on November 9/10 2012. Please find below the program of the meeting. For further information please contact Kathleen Beese.

Learn More

Articles

19.06.2012 | Surgery
Modern surgical results of lung cancer involving neighboring structures: A retrospective analysis of 531 pT3 cases in a Japanese Lung Cancer Registry Study
Read More

19.06.2012 | Surgery
Surgery for oligometastatic non-small cell lung cancer: Long-term results from a single center experience
Read More

19.06.2012 | Surgery
Surgical Resection Should Be Considered for Stage I and II Small Cell Carcinoma of the Lung
Read More

News

19.09.2012 | ETOP News
Lung Cancer
ETOP members have free access to the lung cancer journal. Please register for free to the members area and find there the link to the journal under "Scientific"
Read More

19.09.2012 | ETOP News
ETOP Residential Workshop 2013
ETOP will hold the second residential workshop for young investigators in the field of thoracic malignancies in Lugano, Switzerland on August 29-31th
Read More

Events

26.09.2012 | Vienna, Austria
ESMO Congress 2012
ESMO Vienna 2012

06.11.2012 | Dublin, Ireland
ETOP Meeting 2012
The 5th ETOP meeting takes place in Dublin, Ireland on November 9-10th 2012.

More Events
ETOP meetings

- November 2011 Amsterdam: 4th ETOP meeting
  - Progress on Lungscape
  - Clinical trials BELIEF and EMPHASIS-lung
- May 2012 Lugano: 1st residential Workshop
- November 2012 Dublin: 5th ETOP meeting
  - Progress in Lungscape
  - New clinical trials STIMULI and SPLENDOUR
- August 2013 Lugano: 2nd residential workshop
- November 2013 Barcelona: 6th ETOP meeting
Achievements 2011/2012

• Translational research project Lungscape
  ✓ iBiobank
  ✓ Masterprotocol and ALK project:
    ✓ Peters et al. The ETOP Lungscape project: A way to bridge NSCLC molecular characteristics and clinical data (abstract 11790)
    ✓ Thunnissen et al. External Quality Assessment for ALK Immunohistochemistry Testing in Lung Adenocarcinoma within the ETOP Lungscape Project (abstract 193P)
    ✓ Blackhall et al. Prevalence and clinical outcomes for patients with ALK gene rearrangement in Europe: preliminary results from the ETOP Lungscape Project (abstract 1670)
Towards molecularly driven research in lung cancer: Lungscape, a project of the European Thoracic Oncology platform
Overall Objectives

- Establish a decentralized NSCLC biobank (iBiobank)
- Generate new biological hypothesis
- Establish a clinical trial platform (ETOPdata)
- Develop practical diagnosis algorithms
• **Step 1:**
  Retrospective analysis of 2400 completely resected NSCLC from a 16 sites: Immunohistochemistry, selected FISH, and mutation testing.

• **Step 2:**
  Expansion to biopsies from advanced disease and increasing to the number of participating sites

• **Further steps and issues under considerations:**
  Enlargement of biobank, exon sequencing (selected frozen tissue), circulating biomarkers, technology platforms, resource utilization and health economics research
Methodology: Case inclusion criteria

- Histological diagnosis of NSCLC
- Diagnosis after January 2003 (10% before 2003)
- Adequate quantity and quality of formalin-fixed paraffin embedded tissue
- Documented ethical approval for tissue sample and associated clinical data
- Radically resected non-pretreated stage IA-IIIB NSCLC
- 3 years of follow-up
- Mandatory clinical data available
Belgium
• Leuven:
  J. Vansteenkiste, E. Verbeken, C. Dooms

Denmark
• Aarhus:
  P. Meldgaard, H. Hager

Greece
• Frontier Science Hellas:
  U. Dafni

Ireland
• Dublin:
  K. O’Byrne, S. Finn, S. Gray

Italy
• Chieti:
  A. Marchetti, S. Malatesta

Poland
• Gdansk:
  R. Dziadziuszko, W. Biernat, A. Sejda, A. Wrona

Spain
• Barcelona:
  E. Felip, J. Hernandez-Losa, M. T. Salcedo, M. Canela
• Badalona:
  R. Rosell, M. Taron
• Valencia:
  C. Camps, M. Martorell, E. Jantus-Lewintre

Switzerland
• ETOP Coordinating Center:
  A. Hiltbrunner, S. Peters, R. Kammler, R. King, R. Stahel
• Basel:
  L. Bubendorf, S. Savic
• Zurich:
  W. Weder, A. Soltermann

The Netherlands
• Amsterdam VU (E. Thunnissen, E. Smit
• Amsterdam NKI:
  P. Baas, J. de Jong
• Maastricht:
  A.-M. Dingemans, E-J.M. Speel

Outside of Europe
• China – Shanghai Chest Hospital (S. Lu, Z. Jie)
Histology of accepted cases (June 20, 2012; N = 1863)

Histology (Submitted and Accepted Cases)

- Adenocarcinoma: 62.59%
- Squamous cell: 28.02%
- Sarcomatoid: 0.16%
- NSCLC NOS: 1.23%
- Large cell: 4.72%
- Combined/Mixed (with or w/o parts of SCLC), Specify in Histology Notes: 1.34%
- Adeno-squamous: 4.00%
Stage of accepted cases  (June 20, 2012; N = 1863)

Staging (Submitted and Accepted)

- IIla: 20.67%
- IIIb: 1.77%
- IIib: 11.65%
- IIb: 26.46%
- Ia: 23.13%
- Ib: 16.32%
Achievements 2011/2012

- Clinical trials
  - ETOPdata
  - BELIEF
  - EMPHASIS-lung
- STIMULI
- SPLENDOUR
Clinical trials and translational research in lung cancer: facing the new challenges

Non-small cell lung cancer is a heterogeneous disease

Paradigm shift in clinical trial design:

- **Empiric**: past standard, takes into consideration patient characteristics and physician experience. Expensive, few studies have met primary endpoint, if met: questions regarding clinical value and search for appropriate subgroups

- **Molecular-based**: based on molecular characteristics of tumor. New role of translational research as driver for clinical studies
Molecular pathology at diagnosis and at relapse for selection or stratification of study population
- Centralized analysis or standardization of methodologies between sites
- Availability of integrated services at sites

Rarity of molecular subgroups
- Large networks of sites necessary to detect eligible patients
- Optimal number or sites for a given trial

Emphasis on early decision in molecularly-driven trials
- New models of collaboration with diagnostic and pharmaceutical companies
ETOP 2-11 BELIEF: Bevacizumab and Erlotinib In EGFR mut+ NSCLC

An open-label phase II trial of erlotinib and bevacizumab in patients with advanced non-small cell lung cancer and activating EGFR mutations
Sample seize 102 patients

Screening and Registration Phase

Eligible and EGFR mutation confirmed (screening=1135 pts)

Treatment and Evaluation Phase

150 mg erlotinib daily and 15 mg/kg bevacizumab every 3 weeks until progression or unacceptable toxicity

Procedures at Progression

Recommendation for chemotherapy based on gene array

Substudy 1: T790M present (n=35)
Substudy 2: T790M absent (n=67)

Translational research study subprojects

Tumor gene expression array
Plasma EGFR mutation monitoring
Tumor rebiopsy, gene expression array and mutation analysis
A randomized phase III trial of erlotinib versus docetaxel in patients with advanced squamous cell non-small cell lung cancer who failed first line platinum based doublet chemotherapy stratified by VeriStrat Good vs VeriStrat PooR

Sample size: 500 patients
ETOP 4-13 STIMILI: Small cell lung cancer Trial with Ipilimumab in Limited disease

A randomized phase II trial of consolidation ipilimumab vs placebo in limited-stage SCLC after chemoradiotherapy
260 randomized patients

**Chemotherapy:** 4 cycles of Cisplatin 25 mg/m² iv D1-3 or 75 mg/m² D1 Etoposide 100 mg/m² iv D1-3, q21D.

**Thoracic Radiotherapy:** Accelerated twice-daily, administration of 1.5 Gy in 30 treatments over three weeks (preferred) or once-daily radiotherapy, administration 1.8-2 Gy per fraction up to 55-60 Gy. Starting from D1 or 22 of cycle 1.

**PCI:** 20 Gy in 5 or 8 fractions, 24 Gy in 12 fractions, 25 Gy in 10 fractions, or 30 Gy in 10 or 12 fractions, started between D5 and D10 of cycle 4.

**Ipilimumab (or placebo schedule):** Induction course of ipilimumab, at a dose of 10 mg/kg, once every 3 weeks for four treatments. Maintenance: 10 mg/kg, once every 12 weeks. Started 4-5 weeks after cycle 4 (after completion of PCI).
ETOP 5-13 SPLENDOUR: Survival imPovement in Lung cancEr iNduced by DenOsUmab theRapy

A randomized phase III trial evaluating the addition of denosumab to standard first-line anticancer treatment in advanced NSCLC
1000 randomized patients

Key Inclusion
Advanced NSCLC Stage (IV)
PS 0-2
PET/CT or Bone scan at inclusion
1st line chemotherapy (adjuvant allowed)

Stratification
Bone mets vs no bone mets
Centre

Chemotherapy* + denosumab 120mg sc q 1 mos

Supplement calcium and Vitamin D

Chemotherapy* + BSC

* Platinum-based chemotherapy
Cis/carbo and gem or pem

Secondary Endpoints:
Progression Free Survival
QOL
Blood, urine and tissue biomarkers analysis
Toxicity

Primary endpoint:
Overall Survival
Thank you for listening!

www.etop-eu.org