## **Biobanking within ETOP to Advance Precision Medicine on Thoracic** Malignancies <sup>1</sup>Rosita Kammler, <sup>1</sup>Nesa Marti, <sup>2</sup>Jean-Paul Rivals, <sup>3</sup>Jan Hendrik Rüschoff, <sup>4</sup>Miguel-Angel Molina-Vila, <sup>5</sup>Sabine Merkelbach- Bruse, <sup>6</sup>William Cookson, <sup>6</sup>Miriam F.

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#### Introduction

The European Thoracic Oncology Platform (ETOP) was founded in 2009 to promote and improve collaboration in clinical and translational research on thoracic malignancies. The heart of the ETOP translational research is formed by the clinicaltrials-biobank and the Lungscape and Mesoscape both have decentralized, 'virtual' programs, iBiobanks.

## Methods

- •ETOP clinical-trials-biobank: centralizes samples to answer clinical trial-related questions and deepen the knowledge gained within ETOP clinical studies.
- •Lungscape iBiobank: more than 2700 non-smallcell lung cancer specimens
- •Mesoscape iBiobank: 500 malignant-pleural mesothelioma cases

The samples collected are linked to de-identified, fully annotated rich clinical data:



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within ETOP;

Integral to ETOP clinical trials, is the central collection of whole blood, plasma, serum and FFPE tumor samples for immune profiling, NGS, and more. In the latest trial, microbiome samples are also centralized in the ETOP clinical-trials-biobank.

Lungscape 001 ALK project

More than 210 participating centers in 18 countries across Europe, North American, Asia and Australia contribute to the ETOP clinical-trials-biobank and the Lungscape and Mesoscape iBiobanks.



Geographic Distribution of Patients in ETOP TR Projects

#### Conclusions

Disease-based biobanking within ETOP accelerates scientific discovery and paves the way for clinical practice.

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#### Results

The Lungscape and Mesoscape iBiobanks are unique in providing a platform to selected European and North American lung cancer centers to conduct collaborative biomarker research

These biomarker driven projects so far include studies on ALK, MET, PTEN, Multiplex Mutation Testing, RANK, PD-L1, TMB, ROS1 and pS6.



Geographic Distribution of Patients in ETOP Clinical Trials

## Acknowledgments

ETOP thanks the patients participating in the ETOP clinical trials. ETOP thanks the pathologists, physicians, nurses, data and trial coordinators.





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