Day one, 16th June

Diagnosis and Early Diagnosis

- 07.00 - 08.00  Registration
- 08.00 - 08.10  Opening and welcome: Prof. Pål Romundstad, Dean of Research, Faculty of Medicine, NTNU, Norway
- 08.10-08.30  Introduction: Biomarker Evolution – The HER2-story, Oluf, D. Røe, NTNU, Norway.
  Chairs: S. Lundgren and E. Wist, Norway.
- 08.30-09.00  Diagnosis of cancer and its implications: From palpation of tumor to molecular signatures, the breast cancer story, Erik Wist, Dept. of Oncology, Oslo University Hospital, Norway
09.00-09.30  HER2 – the example of a biomarker as predictor and target in various cancers, Steinar Lundgren, Dept. of Oncology, St. Olavs Hospital, Norway

- 09.30-09.45  Coffee break

The many facets of diagnostics

Chairs: M. Vyberg (Denmark) V. Georgoulia (Greece) J Creaney (Australia)

- 09.45-10.15  Immunohistochemistry in cancer diagnosis, the pitfalls and the future
  Mogens Vyberg, Aalborg University Hospital, Denmark
- 10.15-10.45  Circulating tumor cells (CTC) in women with early and recurrent breast cancer: Research and clinical applications. Vasileios Georgoulia/ Sofia Agelaki, Dept. of Oncology, University Hospital of Crete, Greece
- 10.45-11.15  Mesothelin, discovery of a diagnostic marker that became a target
  Jenette Creaney, National Center for Asbestos Related Diseases (NCARD), University of Western Australia, Perth, Australia.
- 11.15-11.45  From worm to man: Discovery of microRNA and current potential in clinical oncology (Pending)
- 11.45-12.15  Lunch / Poster walk

Multi-omics – catching all in one test?

Chairs: I. Tsamardinos (Greece) O. D. Røe (Norway) AI Robles (USA)

- 13.45-14.15  Automated Computational Discovery of Biomarkers and Biosignatures from Data Using Machine Learning, Ioannis Tsamardinos/Vincenzo Lagani, Dept. of Computer Science, University of Crete, Greece
• 14.15-14.45 Cancer-Biomarkers in HUNT study: Early diagnostic poly-markers in lung cancer and mesothelioma, Oluf D. Røe, Dept. of Cancer Research and Molecular Medicine, NTNU, Norway

• 14.45-15.15 Pleural fluid and biosignatures. Katalin Dobra, Dept. of Pathology, Karolinska Hospital, Stockholm, Sweden

Oral presentations:

• 15.15-15.25 Blood gene expression profiles reflect temporality and clinical parameters up to six years before breast cancer diagnosis. The Norwegian Women and Cancer Post-genome cohort (Kvinne og Kreft-studien). Karina Standahl Olsen, Department of Community Medicine, UiT The Arctic University of Norway, Tromsø, Norway

• 15.25-15.35 Identification of Potential New Biomarkers for Early Diagnosis of Gastric Adenocarcinoma: Metabolomics and Transcriptomics Analyses of Gastric Intestinal Metaplasia, Gøran Andersen, Department of Surgery, St. Olav's Hospital, Trondheim, Norway

• 15.35-15.45 miR-21 quantitative in situ hybridization and its value as biomarker in a clinical setting, Boye Schnack Nielsen, Bioneer A/S, Hørsholm, Denmark

• 15.45-16.15 Plenary discussion Day 1
Panel: O. D. Røe, V. Georgoulis, M. Vyberg, I. Tsamardinos

• 16.15-17.00 Poster walk / Networking

End of scientific program

Social program (to be announced)
Day two, 17th June

**Prognosis, Prediction and Therapy.**

- 07.00-08.00 Registration
- 08.00-08.15 Welcome and introduction

**Immune checkpoints and biomarkers in a new era – the PD1 and PD-L1 example**

**Chairs: N. Minato (Japan) R. Anders (USA)**

- 08.15-09.00 *Discovery and function of PD1*, Nagahiro Minato, Department of Medical Chemistry, Kyoto University, Japan
- 09.00-09.30 *Prognostic and predictive role of PD1 and PDL1 in cancers*, Robert Anders, Dept. of Pathology, Johns Hopkins, Baltimore, USA
  
  09.30-09.45 Coffee Break

**Biomarkers and targets – integration of knowledge to the clinic**

**Chairs: V Papadimitrakopoulou (USA) H. Krokan, A.L. Børresen Dale (Norway)**

- 09.45-10.15 *The translational potential of circulating tumor DNA in oncology*
  Dana Tsui, Dept. of Pathology and Center for Molecular Oncology Memorial Sloan Kettering Cancer Center, New York, USA

- 10.15-10.45 *Innovative Clinical Trials including biomarkers: The LUNG-MAP Study, Vassiliki Papadimitrakopoulou, Dept. of Thoracic/Head and Neck Medical Oncology, MD Andersson, Houston, USA*

- 10.45-11.15 *Role of multi-level molecular analyses as prognostic markers in breast cancer, Anne-Lise Børresen-Dale, Dept. of Genetics, Oslo University Hospital, Norway*

- 11.15-11.45 *BRCA1/MAD2L1 control of spindle poison-induced apoptosis in Mesothelioma, Sara Busacca, Dept. of Cancer Studies, University of Leicester, UK*

- 11.45-12.15 Lunch / Poster Walk
- 12.00-12.45 *Lunch symposium (sponsored by Boehringer): Liquid biopsies to detect EGFR mutations in circulating tumor DNA in lung cancer. Marker for response/progression.*
  Prof. Boe Sandahl Sørensen, Department of Clinical Biochemistry, Aarhus University Hospital, Denmark
The DNA in trouble – DNA repair and novel mechanisms in oncology

J. Zhou (China) H. Krokan, D. Chen (Norway)

· 13.15-13.45 DNA repair research was awarded the Nobel Prize in 2015. What is the role of DNA repair as a predictive marker and target for cancer treatment? Hans Krokan, Dept. of Cancer Research and Molecular Medicine, NTNU, Norway

· 13.45-14.15 Tumor JWA and XRCC1 as predictive and prognostic factors in gastric cancer, Jianwei Zhou, Dept. of Molecular Cell Biology & Toxicology, Nanjing Medical University, Nanjing, China

· 14.15-14.45 Nervous system as cancer target: Application of Botulinum toxin A for treatment of gastric cancer, Duan Chen, Dept. of Cancer Research and Molecular Medicine NTNU, Trondheim, Norway

Oral presentations

· 14.45-14.55 MicroRNAs as prognostic biomarkers for survival in surgically treated malignant pleural mesothelioma patients, Michaela B. Kirschner, Division of Thoracic Surgery, University Hospital Zurich, Switzerland, Asbestos Diseases Research Institute, Sydney, Australia

· 14.55-15.05 Circulating Tumor DNA to Monitor Total and Mutated Tumor Mass in Multiple Myeloma, Even Holth Rustad, Center for Myeloma Research, Department of Cancer Research and Molecular Medicine, NTNU, Trondheim, Norway

· 15.05-15.15 Microvascular proliferation in breast cancer, Maria Ryssdal Kraby, Dept. of Laboratory Medicine, Children’s and Women’s Health, NTNU, Trondheim, Norway

· 15.15-15.30 Non-canonical Wnt5a signalling is associated with EMT and Metabolic alterations in human Prostate Cancer, Elise Sandsmark, Dept. of Circulation and Medical Imaging, NTNU, Trondheim, Norway

· 15.30-16.00 Plenary discussion Day 2

Panel: V. Papadimitrakopoulou, J. Zhou, O. D. Røe,

End of Symposium.