

LECTURE SERIES & WORKSHOPS

CANCER RESEARCH

17

MAR. 2016

Thursday



LECTURE

CHL,
Amphitheatre

4.00 - 5.00 pm

WORKSHOP *

CHL,
Room R1A

5.15 - 6.15 pm

* Please register for the workshop by sending an email to florence.henry@lih.lu



SPEAKER

**Prof Anne-Lise
BØRRESEN-DALE**

Professor and Group leader.

Department of Cancer Genetics,
Institute for Cancer Research, Oslo
University Hospital The Norwegian
Radiumhospital, and Institute
for Clinical Medicine, Faculty of
Medicine University of Oslo, Norway.

MOLECULAR EVOLUTION UNDER NEOADJUVANT CHEMOTHERAPY

ABSTRACT

During this lecture, Prof Børresen-Dale will present conclusive data from the Neoadjuvant Avastin (NeoAva) study, a randomised phase II trial conducted with 132 HER2-negative breast cancer patients. The study aimed at investigating molecular alterations in breast tumours preoperatively treated with chemotherapy, with or without the antiangiogenic agent bevacizumab.

Using magnetic resonance spectroscopy, high-throughput data was generated from serial biopsy samples collected at the time-point of diagnosis, during treatment and after surgical removal of the tumours. Different molecular levels

were studied separately and combined in order to capture the changes during treatment of the two regimes and correlate the findings to response. The sub-clonal architecture of the tumours was also evaluated and revealed a clear subtype-specific response to treatment.

The results that will be presented in this lecture highlight the importance of dissecting the heterogeneity and molecular profile of a tumour at all levels during its evolution under treatment and demonstrate that sequential biopsies, although invasive, could have a major impact on patient prediction and prognosis.

HOST:

Department of Oncology

RESPONSIBLE LIH SCIENTIST:

Prof Simone Niclou
(simone.niclou@lih.lu)