SEMINAR FRIDAY 17.10.2014

PLACE: MedViz Facilities., Møllendalsbakken 7, 5th floor
TIME : 12:00-13:00

SPEAKERS/TITLE

Title: Preclinical imaging studies of orthotopic mouse models in endometrial cancer

Professor Ingfrid Haldorsen
Researcher Njål Brekke
Researcher Camilla Krakstad

ABSTRACT

Halvorsen
This seminar will focus on preclinical studies of endometrial cancer mouse models conducted by scientist within the Bergen Gynecologic Cancer Research Group and the Bergen Abdominal Imaging Research Group, University of Bergen. The ultimate aim of these preclinical studies is to promote individualized treatment and implementation of targeted therapy amongst patients with gynecologic cancer

Brekke
Preliminary data analysis of mice with endometrial cancer imaged in a pre-clinical PET/CT scanner using both FDG and FLT tracers are presented. Each mouse in the trial were scanned multiple times over a number of weeks, and the acquired images has been analyzed to track tumor growth by looking at parameters such as volume and tracer uptake values. Additional metastases were also mapped. The results will be compared to histology reports to validate the PET/CT findings and evaluate both tracers for further use in preclinical imaging for endometrial cancer.

Krakstad
Comprehensive studies of endometrial cancer disease development and response to treatment are difficult to perform in humans. Orthotopic mouse tumor models permit evaluation of metastatic spread and response to systemic interventions. Luc-positive cell line based models can be monitored using bioluminescence, but lack several of the key hallmarks of a human tumor. Patient derived models (PDX) retain more of the tumor characteristics, but is however difficult to monitor. By combining bioluminescence imaging of the Luc-based mouse model with PET/CT we aim at developing a robust PET/CT protocol to detect tumor growth and therapy response in a PDX setting.