Up-front 18F-FDG-PET/CT in suspected head and neck cancer

PhD student: Max Rohde

<u>Background</u>: 18F-FDG-PET/CT-scan (PET / CT) is used increasingly for detection of cancer. In head and neck cancer (HNC) it has primarily been reserved for a subgroup of patients, suspected to have spread to the neck, with unknown primary tumor. Foreign studies indicate that other patients with suspected HNC may benefit from PET/CT. Specially; PET/CT is capable of detecting the spread of cancer, compared with the conventional applied imaging. However, the value of PET/CT when used up-front, in suspected HNC, is unknown.

<u>Objective</u>: To investigate whether an Up-front PET / CT-scan will result in detection of additional metastases and / or other synchronous cancers than conventional imaging in suspected head and neck cancer, for patients in the Danish HNC fast-track pathway

<u>Method</u>: Prospective cohort investigation based on paired data. Patients in the HNC fast-track pathway at Odense University Hospital are included. If the investigation confirms suspicion of head and neck cancer, the patient will be offered HNC fast-track pathway s and will also be a possible candidate for the project with Upfront PET/CT.

The PET/CT's are blinded with respect to the radiologists, who describe the conventional imaging - vice versa the conventional imaging is blinded to the team of nuclear medicine physician and radiologist, describing the PET/CT.

Perspective: PET/CT improves staging of HNC and replaces conventional imaging of patients with suspected head and neck cancer.