

Identifying parameters influencing loco-regional control and overall survival

The CP6 work package aims at improving survival rates by improvement of local control for inoperable locally advanced lung cancer. The treatment of choice for inoperable lung cancer is radiotherapy (RT). In subproject 2: Identifying parameters influencing loco-regional control and overall survival, we work on relating pre-treatment parameters to the risk of failure in terms of either loco-regional or distant recurrence after radiotherapy. Establishing these will enable patient-specific risk-adapted treatment strategies, where i.e. patients prone to fail loco-regionally will receive intensified radiotherapy treatment. Based on data from Rigshospitalet a competing risk model for first site of failure after definitive chemoradiotherapy for inoperable NSCLC was published [J Thorac Oncol. 2018 13:559-567]. The model uses pre-treatment performance status (PS), stage, histology, concomitant chemotherapy, gender, age, tumor size, SUV_{peak} of the primary tumor and the lymph nodes with the highest uptake to predict the type of failure or death. In this study, we test the published model in an independent external validation cohort from Aarhus University Hospital.