

Dr. Esther Troost is radiation oncologist at MAASTRO clinic specialized in the treatment of head-andneck and lung tumors, in stereotactic radiotherapy, and in new combination treatments, such as immunotherapy. Besides, her clinical and scientific interest is focused on non-invasive functional imaging methods for tumor characterization, response assessment and patient selection.

During her PhD at Radboud University Nijmegen, she assessed the value of FMISO- and FLT-PET for non-invasive characterization of tumor cell hypoxia and proliferation, respectively, in preclinical models and in patients with head-and-neck tumors (HNSCC). At MAASTRO clinic, she is actively involved in the PET-boost study escalating radiation dose in FDG-positive tumor subvolumes in nonsmall cell lung cancer (NSCLC), and in the HX4-PET studies in both HNSCC and NSCLC patients. In collaboration with national and international partners, she assessed different means of response monitoring and tumor delineation on the basis of PET-imaging. Furthermore, she is interested in functional imaging using CT and MRI.