About the Department of Radiation Oncology of the University of Münster

As part of the Münster University Hospital and the Western German Cancer Center (Westdeutsches Tumorzentrum), the Department of Radiation Oncology offers state-of-the-art, high-quality radiation treatments for malignant and non-malignant diseases. Given the high level of experience in our tertiary care center, the entire spectrum of radiation treatments is available, including hypo-fractionated and re-irradiation treatments as well as brachytherapy.

Radiation treatment is administered both in outpatient and inpatient settings, as well as in combination with chemotherapy or immunotherapy regimens. Depending on the disease, radiation may be given pre- or post-operatively.

Five teletherapy patient radiation treatment systems are available, including three TrueBeam™ linear accelerators, a TomoTherapy® system and a Halcyon device. This modern equipment allows for state-of-the-art radiation planning and administration.

A satellite clinic has been opened in 2013 at the hospital "St. Franziskus" in Münster to allow for shorter commutes for patients living east of Münster. Naturally, all locations are connected via telemedicine devices and thus jointly conduct case discussions.

Radiation oncology experts from the Münster University Hospital participate in numerous multidisciplinary tumor boards, both internally, but also externally, including for hospitals in surrounding Warendorf, Hiltrup and St Franziskus. This allows us to introduce our specialized radiation treatment expertise in a multitude of settings, ultimately benefitting patient care. We are in close contact with colleagues from surgery, medical oncology, radiology and pathology to determine optimal care.

Our department consists of medical doctors, medical physicists and radiation biologists, covering the entire breadth of the radiation field. This puts all relevant expertise at our disposal. It facilitates interdisciplinary discussions and deliberate individualized treatment decisions after careful consideration of international treatment guidelines and the patient's individual situation.

Imaging plays a key role in radiation oncology for treatment planning, patient positioning and radiation adaptation. Imaging modalities include computed tomography (CT), magnetic resonance imaging (MRI) and positron emission tomography (PET) as PET-CT or PET-MRI. Careful delineation of healthy tissue during radiation planning minimizes treatment risks. If necessary, organ mobility is considered in time-dependent 4D imaging. We ultimately aim to deposit a sufficiently high radiation dose to achieve tumor control while carefully preserving healthy tissue function. We routinely use modern radiation techniques such as intensity-modulated radiotherapy (IMRT) and have developed index warning systems to identify over- and underdosing of radiation during planning. Naturally, all clinical proceedings are routinely audited by governmental authorities, and we are part of certified quality control processes.

Finally, our department also actively initiates and participates in clinical trials to further optimize treatment regimens. A key focus of our work is lymphoma treatment. Our radiation physics and biology departments similarly help improve scientific understanding of radiation techniques and biological effects of radiation in healthy and malignant tissues.

In summary, at our clinic, we provide individualized, state-of-the-art radiation treatments for malignant and non-malignant diseases. Please feel free contact us for any inquiries.