

Current role of IORT in soft tissue sarcoma

F. Roeder^{1,2}

1: Department of Radiation Oncology, Paracelsus Medical University, Salzburg Austria

2: Institute for research and development of advanced radiation technologies (radART), Paracelsus Medical University, Salzburg, Austria

Abstract:

The general role of radiation therapy within the treatment soft tissue sarcomas has been comparably constant for decades. The main remaining question regarding preoperative versus postoperative treatment seemed also widely solved at least for the most frequently localisations based on several major trials.

In contrast, data from recent studies have questioned some of the long lasting doctrines, for example regarding the general indication as well as hypofractionation. In extremity sarcoma, the need for a boost per se has been questioned. In retroperitoneal sarcoma, the general role of RT seems increasingly limited to several histologies based on randomized data. Moreover, increasing evidence suggests the need for histology-driven and personalized approaches within the heterogenous group of STS.

Consequently, the clinical role of IOERT (usually given as a boost after preoperative or prior to postoperative EBRT) has changed. Similarly to the general role of RT in STS, the technique of IOERT has remained almost constant for decades. However, the recent introduction of intraoperative three-dimensional CBCT imaging with the possibility of real time planning for IOERT has opened a window for new insights regarding ist value.

The current talk will summarize actual developments regarding the general role of RT for STS and shed some light on the current and future role of IOERT based on clinical knowledge and technical achievements.