



ESTRO 2023

From Innovation to Action

12-16 May 2023 | Vienna, Austria

ESTRO 2023 RTT Track

Optimising IGRT and motion management strategies symposium

The optimising IGRT and motion management strategies symposium focused on presenting recommendations for the current challenges of imaging procedures.

Mirjam Mast, a staff member in the research and development of the Radiation Therapy Department at Haaglanden Medisch Centrum in the Netherlands, gave us an excellent overview of the effect of radiotherapy changes on IGRT protocols in breast cancer. She highlighted possible IGRT protocols, the effect of hypofractionation, as well as different treatment techniques in detail. The second part of the presentation introduced future developments, such as MRI-guided RT and oART. Recommendations were also given based on *the ESTRO-ACROP guidelines for positioning, immobilisation and set-up verification for loco-regional photon breast cancer irradiation* – which is currently in its second review – on how to improve an IGRT protocol.

Michael Velec, Assistant Professor and Clinician Scientist-Radiation Therapist at

The University of Toronto and Princess Margaret Cancer Centre, University Health Network, Canada, presented the challenges with targeting, deformation and breathing in upper abdominal IGRT. The presentation focused on motion management considerations, wherein Michael introduced their algorithm on how to pick the best strategy for motion management, described a practical IGRT workflow, and shared experiences with adaptive MR-guided RT (although RTT considerations for IGRT were also mentioned). The most important take-home message from this brilliant overview is that patients would benefit from individualised approaches in both motion management and imaging.

Gawin Lawler's (RTT, Manager of the Irish Research Radiation Oncology Group) presentation focused on IGART strategies in complex lung SBRT. Gawin gave an excellent overview of the possible issues, introducing multiple immobilisation and motion management strategies based on a literature review, personal experience and an SBRT workflow they implemented to ensure accurate, reproducible and clinically effective treatment. IGART techniques were introduced and then compared in fine detail. To improve compliance, which is very much key, the importance of patient education was strongly recommended. Respiratory management was suggested for all thoracic and abdominal SABR such as the usage of SGRT combined with IGRT.



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