

# A new view of SGRT



THE 2023 ANNUAL MEETING OF THE SGRT COMMUNITY

## AN OVERVIEW OF THE 2023 MEETING OF THE SGRT COMMUNITY

Hundreds of clinical experts took part in "A New View of SGRT", making this our biggest-ever European meeting. The event, which took place in London, was packed with insightful presentations, engaging discussions, and a vibrant atmosphere that showcased the transformative power of SGRT at every step on the radiation therapy workflow: Sim, Plan, Treat and Dose.

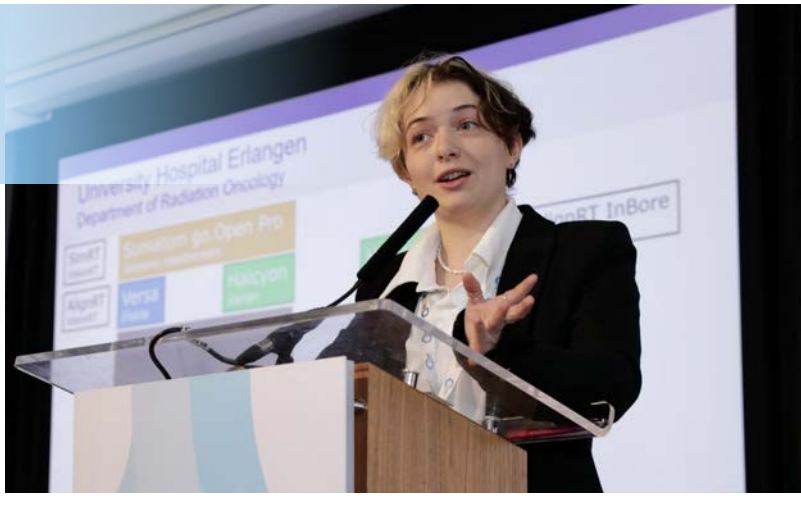
Presentations covered a wide range of topics, including improving efficiencies with non-coplanar treatments, improving time-saving measures, adopting a tattoo and mark-free approach, and more.

### Some highlights:

#### SIM

##### Correlation between surface motion and heart-breast distance for breast cancer patients treated in DIBH

Treating around 20% of patients using DIBH, **Lisa Dietrich, MSc**, discussed her PhD research on utilizing SimRT for breath-hold training and monitoring the breathing state. The rationale behind this implementation was to enhance the reproducibility of DIBH treatments by allowing for better patient selection and potentially improving treatment outcomes.



#### PLAN

##### Improving efficiencies with MapRT

**David Parsons, PhD**, presented compelling findings on the effectiveness of MapRT in simplifying non-coplanar treatments. Parsons and his team recognised a higher dose falloff rate in non-coplanar treatments. By utilizing MapRT, they were able to streamline the treatment process while eliminating collision risks. His research found that MapRT had a 100% success ratio for SBRT and non-coplanar brain patients at UTSW.



##### Dosimetric planning advantages of surface guided planning

**Adi Robinson, Ph.D DABR** presented on the potential of MapRT to improve plan dosimetry for breast cancer, particularly in non-coplanar planning. A major challenge in non-coplanar planning is the risk of collisions. Robinson demonstrated that MapRT can address this issue by creating a clearance map that identifies potential collision hazards. This clearance map can be used to prevent replanning due to collisions and eliminate the need for time-consuming dry runs for complex setups.



#### TREAT

##### Using SGRT for faster, safer and accurate extremity patient positioning

**Ignazio Navarro** of Fundación Jiménez Díaz presented research on SGRT for extremity patient positioning, revealing a notable reduction in daily CBCT. Their findings indicated that 90% of cases could have performed weekly CBCT, and treatment time was reduced by eliminating repositioning needs. This transition from traditional setups to SGRT for extremities showcased significant improvements in efficiency.



##### Big data analysis for setup margin personalization derived from intra-fraction motion: a proof of concept.

**Mathieu Gonod** presented compelling evidence affirming the successful use of SGRT for innovative applications. His research indicates the potential for individualizing PTV margins in 62% of patients, with verifiable predictions at each fraction using AlignRT. This marks a significant advancement in radiotherapy.



##### Introducing AlignRT for head and neck IMRT treatments

**Samantha Ryan** from St Luke's Radiation Oncology Network earned a peer-voted "best presentation" award for her impactful talk. Her findings highlighted a genuine commitment to enhancing the patient experience by using open face masks for head and neck treatments and improving treatment accuracy.



#### DOSE

##### First experiences with DoseRT

The last (but certainly not least) presenter of the event was **Mike Tallhamer**, Chief of Medical Physics at AdventHealth, who presented on the clinical progress and value of DoseRT – one of the latest SGRT innovation from Vision RT. Tallhamer's clinical experience has convinced him of DoseRT's transformative potential: "It's changing the way we're doing radiation oncology," he stated. "It's giving us the information we've been missing...I believe this is going to be the standard of care."



Thank you to all our speakers and poster presenters for helping create an unforgettable peer to peer event.

[Click here for PICTURES](#)

The next SGRT Community meeting will be held on June 6<sup>th</sup> – 7<sup>th</sup> 2024 at the Scottsdale Plaza Resort, Phoenix, AZ, USA.

We invite you to submit on any SGRT-related topic. Travel grants are available for successful submissions.