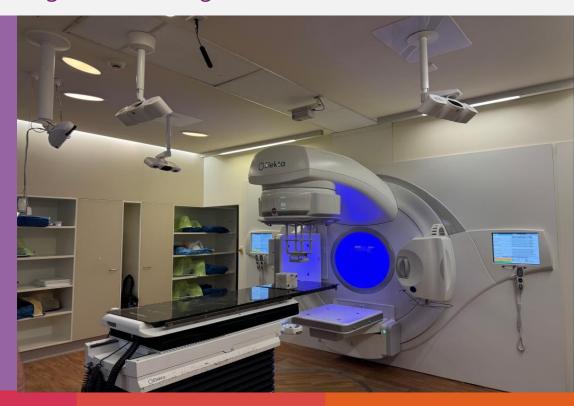


SGRT Annual **APAC** Meeting **2025**: Delivering More Through SGRT

SimRT®: The Breast Cancer Experience at ONJ – From ABC to AlignRT®



Jaculin Mariyadas Radiation Therapist Olivia Newton-John Cancer Wellness & Research Centre



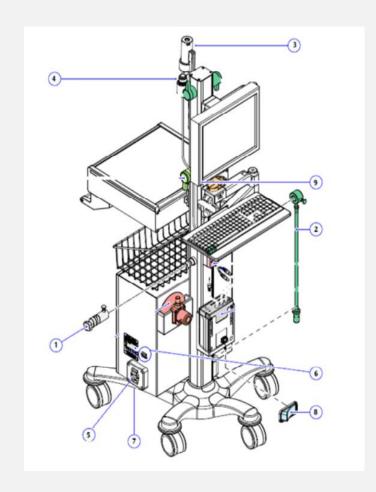
Introduction

- Transitioning from Active Breathing Coordinator (ABC)™ to SGRT for breast cancer patients
- Role of SimRT
- Impacts of SimRT

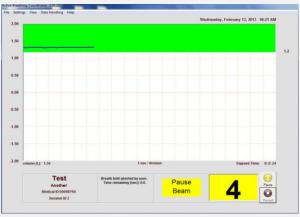


Active Breathing Coordinator™

- Mainstay for DIBH treatment
- Equipment ABC trolley
- How does it work?
 - "Locks" breath-hold at a predefined tolerance
- Challenges:
 - Comfort issues (mouthpieces/nose clip)
 - Patient compliance
 - Time-consuming setup QA









Why shift to Surface Guided Radiation **Therapy** (SGRT)?



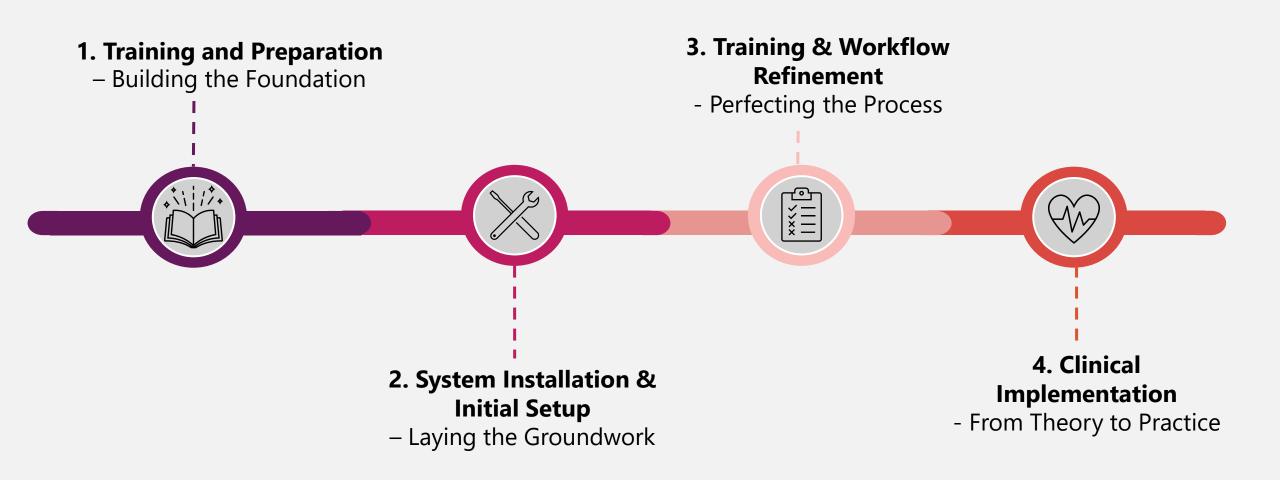
- SGRT benefits:
 - Tattoo-less
 - Real-time surface tracking
 - Non-invasive and contactless
 - Potential to streamline existing workflows



What is SimRT®?











1. Training and Preparation – Building the Foundation

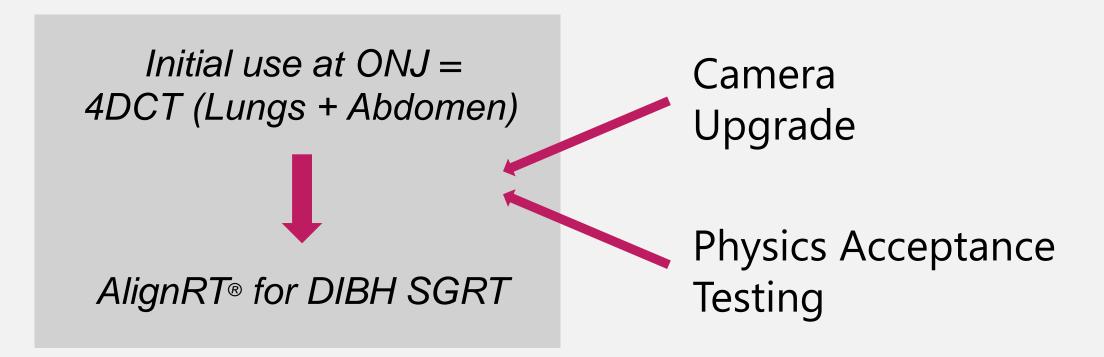
- Superuser training
- Drafting protocols
 - DIBH CT Simulation Work Instruction
 - SGRT Treatment Guidelines (Breast)
 - SGRT Import and ROI Creation







2. System Installation & Initial Setup – Laying the Groundwork







3. Training & Workflow Refinement - Perfecting the Process

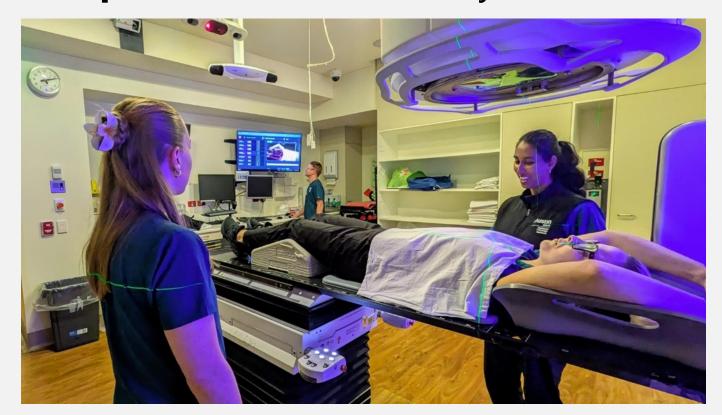
- Vendor training sessions
- Mock DIBH sessions
 - Bottlenecks?
 - Consistency
 - Fine-tune coaching strategies
- Iterative process





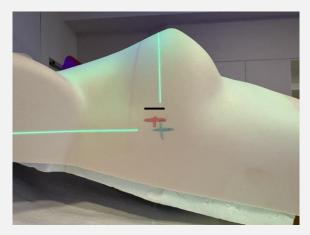


4. Clinical Implementation - Theory to Practice





How do we use SimRT®?



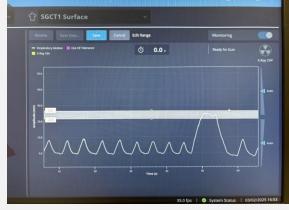
Practice outside the bore



In the bore



Confirm breath hold



Adjust & save Range



Final Check



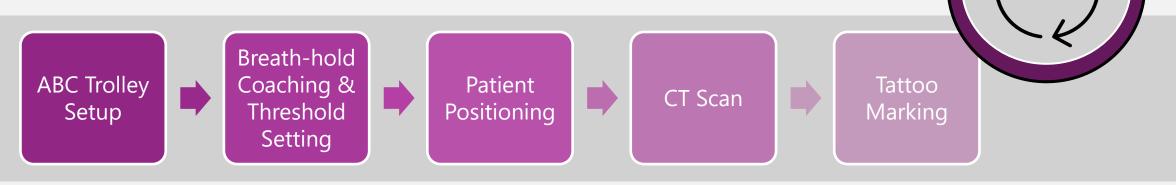
Impact at ONJ: Benefits and Key Outcomes





Clinical Workflow

ABC Workflow

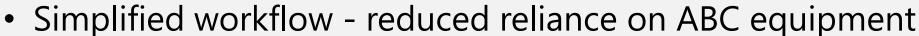


SimRT Workflow





Therapist Perspective





- Greater patient education/engagement
- Limitation: Loss of precise control of patient breathing
 - Clear breath hold criteria
 - Constant reproducibility checks
 - Mock simulations & training



Patient Perspective

"I had picked up a brochure on my first visit and it mentioned tattoos, whilst it didn't upset me... the big thing about it was that it would be a reminder. So, it was a nice surprise learning that I wouldn't need tattoos."



"Without the snorkel, I felt more relaxed, and the breath hold was easier to maintain."

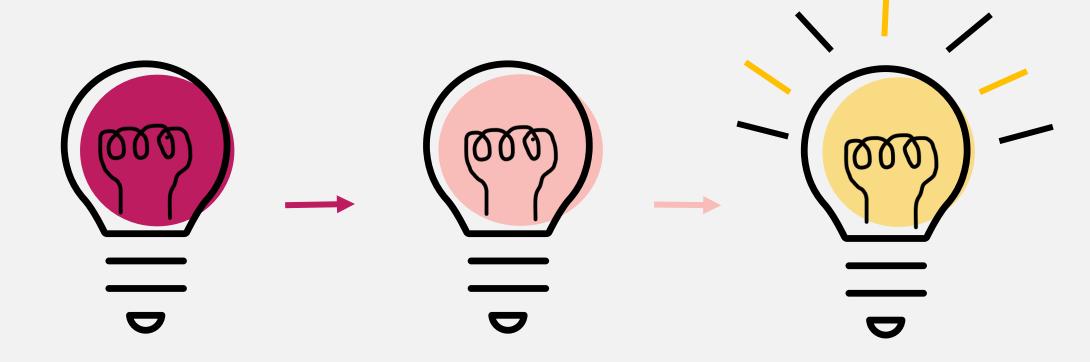


Key Insights and Next Steps





Lessons Learnt



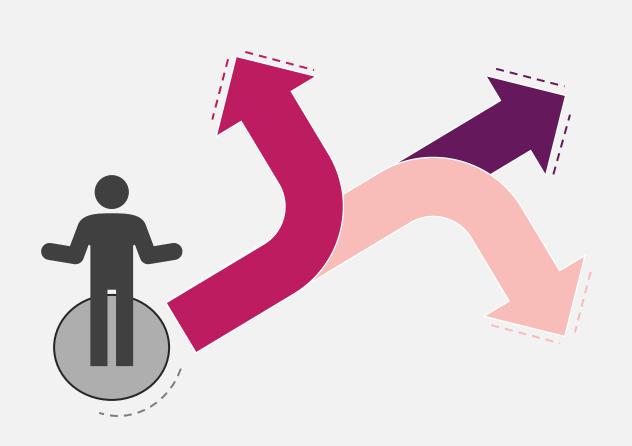
SimRT provides a structured framework for SGRT integration.

Improves patient comfort, workflow efficiency, and therapist satisfaction.

ONJ's experience highlights the clinical value of noninvasive surface tracking.



Looking Ahead



- Refinement of clinical protocols and processes
- Expansion of SimRT use to other treatment sites beyond breast cancer – Lung, Abdomen, Stereotactic radiotherapy
- Research opportunities



Conclusion



Acknowledgements & Questions?

I would like to acknowledge our incredible team (Radiation Oncology Department at ONJ), our patients and our collaborators in the development of this presentation.

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