



Theme: Physics

Abstract No:. PTCOG-AO2025-ABS-0118

Abstract Title: Globalizing Proton Therapy: Expanding Clinical, Academic, and **Operational Frontier**

Author Names: Jia Min Tan¹, Michael Lian-Chek Wang^{1, 2}, John Cheng-Sing Teoh¹

- ¹ Division of Radiation Oncology, National Cancer Centre Singapore, Singapore
- ² Duke-NUS Medical School Singapore, Duke-NUS Medical School Singapore, Singapore

Background / Aims:

Evolving Goh Cheng Liang Proton Therapy Centre (GCLPTC) into an international centre of excellence through collaborations in clinical care, education, research and innovation.



Subjects and Methods:

Besides working with the Health Authority to expand the list of approved proton indications, the other transformative plans of the GCLPTC include:

Technological Advancements in Proton Therapy



Brand Positioning

Dose Driven Continuous Scanning (DDCS) reduces beam delivery time by







Surface-Guided Radiation Therapy (SGRT)

Global and Regional Partnerships and Collaboration

NCCS has academic and clinical collaborations with global and regional proton therapy centres and provide consultancy services for new proton therapy providers, such as Yas Healthcare LLC, etc. **Now Offering On-Site Proton**

Education and Talent Development

NCCS partners with international collaborators to hybrid provide proton therapy education programmes. Ιt also establishes in-house fellowships and knowledge exchange programmes.



provide on-site proton training

NCCS participates in global/regional oncology forums and published clinical outcomes in international journals and increases awareness of the GCLPTC through hosting PTCOG 62 conference, patient outreach and public engagements.

Result:

The GCLPTC treated close to 500 patients in its first 2 years of operations, including patients from 13 countries represented among international patients, while serving the needs of the local population. We continue to build the capabilities and resources to treat a steady state target of at least 800 patients a year with PBT.

Conclusion:

Our journey from a local proton therapy centre to a globally recognized institution demonstrates that deliberate strategic planning, combined with a commitment to excellence in care, education, and collaboration, can drive meaningful international impact.

