



Dr David Tan Boon Harn

Medical Director
Senior Radiation Oncologist (AARO)

MBBS (SIN), FRCR (CLINICAL ONCOLOGY, UK),
FAMS (RADIATION ONCOLOGY)

Clinical Interest: Stereotactic Radiosurgery
(SRS/SBRT), Gynaecological, Gastrointestinal
& Lung Cancers

Dr David Tan Boon Harn is Medical Director and Senior Radiation Oncologist at Asian Alliance Radiation & Oncology (AARO). Within the group, he specializes in the treatment of Gynaecological, Lung, Gastrointestinal, and Hepatobiliary (Liver, Pancreas, & Gallbladder) cancers.

His clinical expertise is in the use of stereotactic radiosurgery and stereotactic body radiation therapy (SRS/SBRT), a highly targeted and ablative radiation treatment to treat primary and metastatic tumours in only 1-5 sessions. He is also trained in Brachytherapy for gynaecological cancers.

Dr. Tan graduated from the National University of Singapore in 2005 and commenced training in Radiation Oncology at the National Cancer Centre Singapore (NCCS) in 2007. In 2011, Dr. Tan received the Health and Manpower Development (HMDP) Award for Advanced Training in Clinical Oncology in the UK. There, at the Mount Vernon Cancer Centre in Middlesex, he obtained advanced training in general oncology and further subspecialized in the above tumour sites. He also trained under renowned experts in stereotactic radiosurgery and brachytherapy.

He obtained his Fellowship in Clinical Oncology from the Royal College of Radiologists in the UK (FRCR) in 2013 and was admitted as a Fellow of the Academy of Medicine, Singapore (FAMS) in Radiation Oncology in 2014.

Prior to joining AARO, Dr. Tan was a Consultant Radiation Oncologist at the National Cancer Centre Singapore (NCCS), specializing in stereotactic body radiotherapy (SBRT) and brachytherapy, and the management of gynaecological, gastrointestinal and hepatobiliary cancers. During his 10 years of service in the public sector, he was responsible for setting up the Liver and Pancreas SBRT programs, and oversaw their development from protocol development to patient enrolment and subsequently to treatment of increasingly complex cases such as multiple liver metastases and portal vein thrombosis in hepatocellular carcinoma (HCC). He is also currently co-investigator in an international IAEA-led trial comparing SBRT with transarterial chemoembolization (TACE) in unresectable HCC.

Dr. Tan is the Singapore National Project Coordinator for the International Atomic Energy Agency (IAEA) Regional Project 6085, which aims to Enhance Stereotactic Body Radiation Therapy for Frequent Cancers in the Asia-Pacific Region. After establishing Singapore as one of the regional training hubs in Asia-Pacific, Dr. Tan conducted the first regional training course of the project in NCCS in 2016, which was attended by participants from 17 member states. He is also council member of the Federation of Asian Organizations for Radiation Oncology (FARO), which is a non-profit scientific organization comprising national radiation oncology societies in Asia to improve the level of radiotherapy in the region.

On the local front, Dr. Tan serves as an executive committee member in the Singapore Radiological Society (SRS) where he holds the office of honorary treasurer, and is also a fellow in the Academy of Medicine. He has been part of the organizing committee for RadiologyAsia 2015 and 2017, which are regional radiology meetings held bi-annually in conjunction with the SRS Annual Scientific Meetings.

As an active member of the radiation oncology subsection of the SRS, Dr. Tan organizes annual scientific dinner-symposiums for the local oncology community to update them on the latest advances in radiotherapy in common tumour sites such as liver, pancreas and prostate malignancies, and on latest technologies such as proton therapy. Dr. Tan also held position as Adjunct Assistant Professor at the Duke-NUS Graduate Medical School where he hosted and supervised medical students for clinical attachments at NCCS, and was clinical lecturer at the Nanyang Polytechnic School of Radiation Therapy where he gave lectures to budding radiation therapists.

Dr. Tan is actively involved in clinical research and has published in major oncology journals on SBRT and brachytherapy, as well as gastrointestinal and gynaecological cancer subject matters. He was invited to be guest editor for a focused issue entitled "Advances in Stereotactic Radiosurgery" in the Chinese Clinical Oncology journal in 2017, where with his co-editors he formulated content and collaborated with international experts to publish the latest updates in stereotactic radiotherapy treatments. He frequently contributes as a reviewer in surgical, oncology and radiotherapy journals. Dr. Tan is a member of the following international oncology societies: American Society of Clinical Oncology (ASCO), American Society for Radiation Oncology (ASTRO), European Society for Radiotherapy and Oncology (ESTRO) and the International Stereotactic Radiosurgery Society (ISRS).

Dr Tan's expertise with radiation technology includes 3D conformal external beam radiotherapy (3D CRT), Intensity Modulated Radiation Therapy (IMRT), Image Guided Radiation Therapy (IGRT), Volumetric Arc Therapy (VMAT), Stereotactic Radiosurgery (SRS), Stereotactic Body Radiotherapy (SBRT), Deep Inspiration Breath Hold Radiotherapy, Gynaecology (cervix and endometrium) image-guided brachytherapy.