



11th International Seminar on Medical Physics (ISMP) 2019



DR JONG WEI LOONG

Department of Clinical Oncology,
University of Malaya Medical Centre,
Kuala Lumpur, Malaysia

email: wljong88@gmail.com

Biography

Dr. Jong is currently working as medical physicist and senior lecturer at University of Malaya Medical Centre. He holds a PhD degree from University of Malaya, specialising in radiation dosimetry and advanced radiotherapy techniques. He is also a certified medical physicist by International Medical Physics Certification Board. He has actively involved in both clinical and research. His work focuses on the stereotactic body radiotherapy, image-guided radiotherapy and quality assurance. He has strong interest on research especially in advanced radiotherapy techniques, radiation dosimetry, treatment planning, and image-guided radiotherapy. He has authored and co-authored several peer-reviewed articles.

Title: Advances in radiation oncology: radiotherapy treatment planning

Abstract

Treatment planning is one of the critical components in the chain of radiotherapy. As radiotherapy becomes more sophisticated for cancer treatment, radiotherapy treatment planning systems have become an essential tool. Treatment planning has been evolved from two dimensional (2D) radiotherapy flat world era to today, the intensity-modulated radiotherapy (IMRT) era. These are been made possible by increasing power and lower cost of computers. Now, IMRT and volumetric-modulated arc therapy (VMAT) have become a standard reference in the field and have both transform our clinical practice and translate into advances in patient care. The history does not end here. The developments and advancements are expected to continue, leading to further automation and improvements in the delivery of radiation to tumours through advanced treatment planning tools. In this talk, I will share few clinical examples to illustrate the advancement in nowadays radiotherapy and address the challenges in the treatment planning of modern radiotherapy.