



Tan Cher Heng

Senior Consultant, Department of Diagnostic Radiology,
TTSH
Assistant Dean (Clinical Research), Lee Kong Chian School of
Medicine, NTU

Research and Innovation Interests:

- Liver Imaging
- Prostate Imaging
- Artificial Intelligence in Medical Imaging

Email: cher.heng.tan@nhghealth.com.sg

Biography

Adjunct Associate Professor Cher Heng Tan graduated with a medical degree from National University of Singapore, post-graduate training in Diagnostic Radiology at MD Anderson Cancer Center, and EMBA from Insead. He is presently Senior Consultant with the Department of Diagnostic Radiology at Tan Tock Seng Hospital (TTSH), Assistant Chairman Medical Board (Clinical Research and Innovation) at TTSH, Executive Director at Centre for Healthcare Innovation as well as Assistant Dean (Clinical Research) for Lee Kong Chian School of Medicine. His subspecialty interests are in oncologic imaging and more recently, use of artificial intelligence in medical imaging.

Selected Publications

- Yang YX, Chong MS, Tay L, Yew S, Yeo A, Tan CH. Automated assessment of thigh composition using machine learning for Dixon magnetic resonance images. *MAGMA*. 2016; 29(5):723-31.
- Tan TW, Png KS, Lee CH, Yuwono A, Yeow Y, Chong KT, Lee YM, Tan CH, Tan YK. MRI Fusion-Targeted Transrectal Prostate Biopsy and the Role of Prostate-Specific Antigen Density and Prostate Health Index for the Detection of Clinically Significant Prostate Cancer in Southeast Asian Men. *J Endourol*. 2017; 31(11):1111-1116.
- Chilla GS, Tan CH, Poh CL. Deformable registration based super-resolution for isotropic reconstruction of 4D MRI volumes. *IEEE J Biomed Health Inform*. 2017; 21(6):1617-1624.

- Hui TCH, Chuah TK, Low HM, Tan CH. Predicting early recurrence of hepatocellular carcinoma with texture analysis of preoperative MRI: a radiomics study. *Clin Radiol.* 2018; 73(12):1056.e11-1056.e16.
- Liew CJ, Krishnasamy P, Cheng LT, Tan CH, Poh AC, Lim TC. Artificial Intelligence and Radiology in Singapore: Championing a New Age of Augmented Imaging for Unsurpassed Patient Care. *Ann Acad Med Singapore.* 2019; 48(1):16-24.
- Loy LM, Lim GH, Leow JJ, Lee CH, Tan TW, Tan CH. A systematic review and meta-analysis of magnetic resonance imaging and ultrasound guided fusion biopsy of prostate for cancer detection-Comparing transrectal with transperineal approaches. *Urol Oncol.* 2020; S1078-1439(20)30147-2.

Translating Research and Innovation Into Healthcare

- New method of diagnosis - Use of multiparametric MRI for fusion targeted ultrasound biopsy. *The Straits Times.* Published 21 February 2017.
<https://www.straitstimes.com/singapore/health/new-method-of-diagnosis>
- AI-powered tool detects lung infection in chest X-rays quickly during Covid-19 screening. *The Straits Times.* Published 2 September 2020.
<https://www.straitstimes.com/singapore/ai-powered-tool-detects-lung-infection-in-chest-x-rays-quickly-during-covid-19-screening>