



Caroline Hoong Wei Shan

Consultant, Department of Endocrinology, Woodlands Hospital

Research/Innovation Interests:

- Calcium and Bone Disorders
- Metabolic Medicine, Diabetology
- General Endocrinology

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Biography

Dr Caroline Hoong completed her training in Endocrinology in 2019, and has an interest in osteoporosis and metabolic diseases. She received the Health Manpower Development Plan (HMDP) Award in 2022 from the Ministry of Health Singapore and completed a fellowship in calcium and bone metabolism at Mayo Clinic, Rochester USA. She is a Certified Clinical Densitometrist as awarded by the International Society of Clinical Densitometry in 2024. In 2025, she received the NMRC CS-IRG-NIG research grant to investigate the prevalence of osteoporosis and management strategies in end-stage renal failure.

Dr Caroline is enthusiastic about teaching and research. She currently serves as the Medical Lead for NUS Yong Loo Lin Phase 3 medical students. She has authored numerous peer-reviewed journal articles and book chapters and serves as a reviewer for several journals. Dr Caroline is also a current and active member of the Endocrine and Metabolic Society of Singapore, serving on its executive committee as its Honorary Treasurer.

Selected Publications

- **Hoong CWS**, Saul D, Khosla S, Sfeir JG. Advances in the Management of Osteoporosis. *BMJ*. 2025 Jul 30;390:e081250. doi: [10.1136/bmj-2024-081250](https://doi.org/10.1136/bmj-2024-081250). PMID: 40738610.
- **Hoong C**, Farr JN, Monroe DG, White TA, Atkinson EJ, Tweed A, Palmer AK, LeBrasseur NK, Sfeir JG, Khosla S. Biomarkers of Cellular Senescence in Type 2 Diabetes Mellitus. *Aging Cell*. 2025 May 30:e70120. doi: [10.1111/acer.70120](https://doi.org/10.1111/acer.70120). PMID: 40448295.
- **Hoong CWS**, Sfeir JG, Drake MT, Broski SM. Ga-68-DOTATATE PET/CT for phosphaturic mesenchymal tumor localization in suspected tumor-induced osteomalacia. *JBMR Plus*. 2025;ziaf040. doi: [10.1093/jbmrpl/ziaf040](https://doi.org/10.1093/jbmrpl/ziaf040).
- **Hoong CWS**, Sfeir JG, Tebben P, Clarke BL. Prognostic factors for refractory outcome in localizing TIO: experience in a tertiary center. *J Clin Endocrinol Metab*. 2025 Jan 6:dgae911. doi: [10.1210/clinem/dgae911](https://doi.org/10.1210/clinem/dgae911). PMID: 39760693.

- **Hoong CWS**, Broski SM, Sfeir JG, Clarke BL. Natural history and complications of normocalcemic hyperparathyroidism: a retrospective cohort study. JBMR Plus. 2024 May 31;8(7):ziae074. doi: [10.1093/jbmrpl/ziae074](https://doi.org/10.1093/jbmrpl/ziae074). PMID: 39290342.
- **Hoong CWS**, Sfeir J, Algeciras-Schimnich A, Clarke BL. A retrospective cohort of tumor-induced osteomalacia and case series of malignant disease. J Clin Endocrinol Metab. 2024 Mar 20:dgae193. doi: [10.1210/clinem/dgae183](https://doi.org/10.1210/clinem/dgae183). PMID: 38506445.
- **Hoong CWS**, Yeo XE, Lin Y, Ooi ST, Yeoh E. High glycaemic variability is associated with progression of COVID-19. Acta Diabetol. 2021 Dec;58(12):1701-1704. doi: [10.1007/s00592-021-01779-7](https://doi.org/10.1007/s00592-021-01779-7). PMID: 34347210.
- **Hoong CWS**, Chua MWJ. SGLT2 inhibitors as calorie restriction-mimetics: insights on longevity pathways and age-related diseases. Endocrinology. 2021 Aug 1;162(8):bqab079. doi: [10.1210/endocr/bqab079](https://doi.org/10.1210/endocr/bqab079). PMID: 33857309.
- Koh H, Moh AMC, Yeoh E, Lin Y, Low SKM, Ooi ST, Tan SK, Lin JHX, **Hoong CWS**. Diabetes predicts severity of COVID-19 infection in a retrospective cohort: A mediatory role of the inflammatory biomarker C-reactive protein. J Med Virol. 2021 May;93(5):3023-3032. doi: [10.1002/jmv.26837](https://doi.org/10.1002/jmv.26837). PMID: 33527464.
- **Hoong CWS**, Hussain I, Aravamudan VM, Phyu EE, Lin JHX, Koh H. Obesity is Associated with Poor Covid-19 Outcomes: A Systematic Review and Meta-Analysis. Horm Metab Res. 2021 Feb;53(2):85-93. doi: [10.1055/a-1326-2125](https://doi.org/10.1055/a-1326-2125). PMID: 33395706.
- **Hoong CWS**, Tan MLS, Kao SL, Khoo EYH. Effects of external counter-pulsation on endothelial function assessed by peripheral artery tonometry, levels of glycaemia and metabolic markers in individuals with type 2 diabetes mellitus. Diabetes Metab Syndr. 2020 Nov-Dec;14(6):2139-45. doi: [10.1016/j.dsx.2020.11.003](https://doi.org/10.1016/j.dsx.2020.11.003). PMID: 33334725.

Notable Research/Innovation Awards & Grants from Past 5 Years

Name of Awards & Grants	Year Obtained
Small PROjects Utilising Teams (SPROUTS) II Grant	2021
National Medical Research Council (NMRC) Clinician Scientist Individual Research Grant – New Investigator Grant	2025