

Latest Advancement in Clinical Data: SGLT2 Inhibitors in Chronic Kidney Disease

Biography



Dr Allen LIU graduated from the Chinese University of Hong Kong and completed his fellowship training in Nephrology and Advanced Internal Medicine in Hong Kong. He currently serves as the Senior Consultant Nephrologist and Head of the Division of Nephrology at Khoo Teck Puat Hospital (KTPH) in Singapore. He also holds an academic position as Assistant Professor (Clinical Practice) at the Lee Kong Chian School of Medicine, Nanyang Technological University. He is the chairman of the Clinical Research Committee at the National Kidney Foundation, Singapore.

Dr. Liu's research interests span interventional nephrology, acute kidney injury, peritoneal dialysis, nutrition and metabolism in chronic kidney disease, sodium-glucose co-transport 2 inhibitors in diabetic kidney disease, and the pioneering application of artificial intelligence in diagnostics for fluid management in dialysis patients.

His commitment to clinical research is evident through his involvement in various grants and scientific awards, including the Science Translational and Applied Research Grant at KTPH (2018, 2019, 2024) and the Clinician Innovator Award from the National Medical Research Council Singapore (2024).

Abstract

Chronic kidney disease (CKD) affects approximately 1 in 10 adults or an estimated 850 million people and has recently been acknowledged as the 'hidden epidemic'. Nearly 90% of adults with CKD do not know they have the condition. Sodium-glucose cotransporter 2 (SGLT2) inhibitors, such as empagliflozin, canagliflozin and dapagliflozin, are designed as oral anti-hyperglycemic agents by promoting renal excretion of glucose. Apart from their glucose-lowering effects, CV outcome trials have shown that they also provided cardiorenal benefits in patients with T2DM. Since then, more recent evidence has extended the use of SGLT2 inhibitors for the treatment of disease with high unmet needs, such as chronic kidney disease. In this lecture, the latest clinical evidence, practical considerations, and recent international guideline recommendations on the use of SGLT2 inhibitors will be discussed.