

Abstract Submission No. : IL-9115

Anti-Glycemic Agents in 2019: Beyond Glucose

Adrian Liew

Tan Tock Seng Hospital, Singapore, Singapore

Diabetic kidney disease has become the main cause of end-stage kidney disease around the world, predominantly affecting many countries in Asia. While targeting HbA1c had been the traditional approach in reducing the risk of micro- and macrovascular complications in patients with diabetes, advances in the understanding of the pathophysiology of hyperglycemia have seen new classes of anti-glycemic agents being developed for treatment in this population. These new medications have been shown to have significant benefits beyond just glucose control, and various experts and guidelines have advocated for their use in specific indications other than preventing hyperglycemia. Indeed, this concept is not unfamiliar, as Metformin, one of the oldest diabetic medications, had been recommended for patients with obesity, with suggestions that it might have some cardioprotective effects. Randomized control trials with SGLT2 inhibitors have demonstrated both cardioprotective and renoprotective benefits in patients with diabetes mellitus, and has opened up an exciting field of clinical advantages in diabetic kidney disease since the era of RAAS blockade. In addition, other drugs like GLP1 receptor agonists and DPP-4 inhibitors have shown to reduce cardiovascular events and could be preferred in patients with atherosclerotic cardiovascular diseases. Consequently, the use of anti-glycemic agents in the treatment of diabetes mellitus would go beyond just glucose control, but will embrace personalized medicine where drugs could be selected and directed towards individual comorbidities.