

# 2<sup>nd</sup> International Conference on Endocrinology Disorders, Diabetes Complications and Hypertension

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## One plus one is eleven: A synergistic cardio protection by combination of GLP-1 receptor agonists and SGLT-2 inhibitors

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Cardiovascular disease is a leading cause of mortality contributing up to 85% in the case of type 2 diabetes. Before the advent of SGLT-2 Inhibitors and GLP-1 Receptor Agonists (RA), there were hardly any benefits on cardiovascular mortality in the treatment of Type-2 Diabetes patients with an Oral Antidiabetic Drug (OAD). Recent evidence of cardiovascular outcome trial (CVOT) of these drugs has shown promising results in comparison of older OAD. The SGLT-2 Inhibitors are beneficial in heart failure while the GLP-1 RAs have a protective effect on atherosclerosis and stroke. Considering the above-mentioned facts, the combination of these two drugs is expected to have an additive effect on cardiovascular disease. Moreover, both of these agents are reno-protective and have a favourable effect on Non-Alcoholic Steato Hepatitis (NASH), hence expected to enhance cardio protection in high-risk cases. Although there is a paucity of randomised controlled trials (RCTs) in this area like DURATION-8, AWARD-10 and SUSTAIN-9, it suggests favourable outcomes more than the additive effect of these drugs discussed earlier. Furthermore, the meta-analysis of the pooled data from these trials, comparing cardiovascular benefits of the combination of SGLT-2 inhibitors and GLP-1 RA to SGLT-2 inhibitor alone, has also shown favourable effects, but at cost of the increased risk of hypoglycaemia. Finally, there is a difference in sequential start and the simultaneous start of these two drugs. The approach may vary depending upon the type of SGLT-2 inhibitors or GLP-1 RAs used and the patient characteristics. This presentation will give an overview to clinicians about the placement of SGLT-2 inhibitor and GLP-1 RA combination in high-risk Type 2 Diabetes patients, for treatment and prevention of cardiovascular disease.

**Keywords:** GLP1 Receptor Agonists, SGLT-2 Inhibitors, Cardio Protection, Additive Effect.

### Biography

Ashutosh Mishra is a renowned Endocrinologist and Diabetologist from Varanasi. He has done his MBBS and MD from prestigious Institute of Medical Sciences, BHU and Fellowship in Diabetes from CMC Vellore. He is the Founder Director of Panacea Hospital and Diabetes Care Organization, where he also serves as head of Endocrinology, Diabetes & Metabolism. He has also served as an endocrinologist at prestigious hospitals like SGPGI, Lucknow and FORTIS Hospital, New Delhi. He is also the National Coordinator for Cardio- Diabetes Self- Management Education (CDSME) Program and Dean of Panacea Institute of Interdisciplinary Research and Education. He is also the national secretary of CARDIABON -A Society of Cardio Diabetes and Renal Disease.

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