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New therapies for Patients With Type 2 Diabetes and Obesity

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Overweight and obesity is frequently present in patients with type 2 diabetes. Overweight and obesity and poor glycemic control increase the risk of diabetes-related complications including cardiovascular disease and chronic kidney disease. A healthy lifestyle is key to reduce body weight, improve glycemic control and reduce the risk of morbidity and premature mortality. Unfortunately, many patients experience difficulties to sustain a health lifestyle over prolonged periods and pharmacological treatment is often necessary to reduce body weight and improve glycemic control.

In the last years various new drugs have emerged that reduce HbA1c and body weight. SGLT-2 inhibitors have been shown to reduce body weight and HbA1c but their effects are relatively modest compared to incretins. The GLP-1 receptor agonist Semaglutide reduces body weight in patients with and without type 2 diabetes as demonstrated in the phase 3 STEP trials. Subsequent analyses from the STEP trials demonstrated that semaglutide significantly reduced risk factors of cardiovascular and kidney disease progression including LDL-cholesterol, albuminuria and C-reactive protein. Long-term cardiovascular and kidney benefits of semaglutide in individuals with overweight or obesity are investigated in the SELECT trial. The dual GIP GLP-1 receptor agonist tirzepatide has also demonstrated reductions in HbA1c and body weight in overweight or obese individuals with or without type 2 diabetes in the SURPASS and SURMOUNT studies. A pooled analyses of the SURPASS trials reported that tirzepatide may decrease cardiovascular risk and another study showed that tirzepatide reduced albuminuria and glomerular filtration rate decline compared to insulin glargine. The long-term effects of tirzepatide on cardiovascular outcomes are investigated in the SURPASS-CVOT and SURMOUNT-MMO trials.

The learning objectives of this presentation are to summarize the epidemiology of obesity and type 2 diabetes, to review the effects of lifestyle measures to reduce body weight and improve glycemic control and discuss the pharmacotherapy for obesity and type 2 diabetes.