

Luncheon Symposium 7

Chairperson

Chang Beom Lee Hanyang University, Korea

Speaker

Yong-Ho Lee Yonsei University, Korea

International Congress on Obesity and MEtabolic Syndrome hosted by KSSO





Yong-Ho Lee

Yonsei University, Korea

Education

Period	Affiliation	Position
– 2006–2014	Yonsei University College of Medicine	M.S, Ph.D.
– 1999–2005	Yonsei University College of Medicine	M.D.

Affiliations / Experience •

Period	Affiliation	Position
– 2015-Present	Yonsei University College of Medicine	Associate professor
– 2020-2022	Buck Institute for Research on Aging, CA, USA	Visiting scientist

Committee Memberships

- Korean Diabetes Association (KDA)
- Korean Academy of Science and Technology, Young Korean Academy of Science and Technology (Y-KAST)

Publications

- Wonjung Park, et al, Lee YH (Co-corres), Jayoung Kim, Hong Kyun Kim, Jang-Ung Park. In-depth correlation analysis between tear glucose and blood glucose using a wireless smart contact lens. Nat Commun. 2024;15(1):2828
- Chun HJ, Kim ER, Lee M, & Han DH, Cha BS, Lee YH (Co-corres) Increased expression of sodium-glucose cotransporter 2 and O-GlcNAcylation in hepatocytes drives non-alcoholic steatohepatitis. *Metabolism*. 2023;145:155612
- Kim ER, Park JS, et al, &, Bae SH, Lee YH (Co-corres). A GLP-1/GLP-2 receptor dual agonist to treat non-alcoholic steatohepatitis: targeting the gut-liver axis and microbiome. Hepatology, 2022;75(6):1523-1538
- Lee JY, Kim Y, Han KD, Han E, Lee BW, Kang ES, Cha BS, Ko SH, Lee YH (Corres). Analysis of Severe Hypoglycemia among adults with Type 2 Diabetes and Non-alcoholic Fatty Liver Disease. JAMA Network Open, 2022;5(2):e220262
- Y Cho, H Rhee, & Lee YH (Corres). Ezetimibe combination therapy with statin for non-alcoholic fatty liver disease: an open label randomized controlled trial (ESSENTIAL study). BMC Medicine 2022;20:93

Luncheon Symposium 7 SGLT2i: Beyond Glucose Lowering Effects

Yong-Ho Lee (Yonsei University, Korea)

Obesity significantly exacerbates the risk of diabetes and myocardial infarction, with the 2021 Korean Society for the Study of Obesity Factsheet reporting a 2.6-fold increased risk of diabetes and a 1.3-fold higher risk of myocardial infarction in obese individuals. This presentation explores effective strategies for managing diabetes in obese patients, focusing on recent guidelines, combination therapies, and clinical evidence supporting an integrated care approach.

The 2023 Korean Diabetes Association guidelines recommend sodium glucose co-transporter 2 (SGLT2) inhibitors as the preferred treatment for glycemic control in diabetic patients with heart failure, chronic kidney disease, and atherosclerotic cardiovascular disease. These guidelines emphasize the importance of clear glycemic targets in managing these high-risk patients.

Evidence shows that SGLT2 inhibitors lower blood glucose through insulin-independent renal mechanisms. Furthermore, combining DPP-4 inhibitors (e.g., sitagliptin) with SGLT2 inhibitors (e.g., dapagliflozin) and metformin provides superior glycemic control compared to monotherapy. This combination offers enhanced blood sugar reduction through synergistic and complementary mechanisms of action, without increasing insulin or glucagon levels. The use of fixed-dose combination drugs has been shown to improve medication adherence and reduce costs. Tailoring treatment to each patient's specific needs further enhances adherence and effectiveness, leading to more individualized therapeutic approaches.

Patients with type 2 diabetes, especially those with obesity, hypertension, and dyslipidemia, face a higher risk of cardiovascular diseases. Therefore, a comprehensive management approach is essential for these high-risk groups. Due to their effectiveness and broad benefits, SGLT2 inhibitors should be a key component of treatment plans. Adapting treatment strategies to fit individual patient needs will enhance therapeutic options and improve clinical outcomes.

This lecture will present these topics, providing a comprehensive overview of the latest strategies for managing diabetes in obese patients, with a focus on improving outcomes through targeted therapies and personalized care.