

Breakfast Symposium 6

Chairperson

Keun-Mi Lee

Yeungnam University, Korea

Speaker

Seung-Hwan Lee

The Catholic University of Korea, Korea



Seung-Hwan Lee

The Catholic University of Korea, Korea

• Education

Period	Affiliation	Position
- 2013	The Catholic University of Korea	Ph.D.
- 2001	The Catholic University of Korea	M.D.

• Affiliations / Experience

Period	Affiliation	Position
- 2013-Present	Seoul St. Mary's Hospital, The Catholic University of Korea	Professor
- 2016-2017	UCSF	Visiting Professor
- 2011-2013	BIDMC, Harvard Medical School	Research Fellow

• Committee Memberships

- Obese Diabetes TFT, Korean Diabetes Association
- Committee of publication, Korean Diabetes Association
- Clinical research committee, Korean Society of Lipidology and Atherosclerosis
- Committee of scientific affairs, Korean Society for the Study of Obesity

• Publications

- Seung-Hwan Lee, Kyu Na Lee, Jong-Chan Youn, Hun Sung Kim, Kyungdo Han, Mee Kyoung Kim. Different associations between lipid levels and risk for heart failure according to diabetes progression. *Diabetes Metab J* In press
- Marie Rhee, Joonyub Lee, Eun Young Lee, Kun-Ho Yoon, Seung-Hwan Lee*. Lipid variability induces endothelial dysfunction by increasing inflammation and oxidative stress. *Endocrinol Metab* 39:511-520, 2024
- Soo Lim*, Seung-Hwan Lee*, Kyung-Wan Min, Chang Beom Lee, Sang Yong Kim, Hye Jin Yoo, Nan Hee Kim, Jae Hyeon Kim, Seungjoon Oh, Jong Chul Won, Hyuk-Sang Kwon, Mi Kyung Kim, Jung Hwan Park, In-Kyung Jeong, Sungrae Kim. Multicenter, double-blind, placebo-controlled, randomized, parallel comparison, phase 3 trial to evaluate the efficacy and safety of pioglitazone add-on therapy in type 2 diabetic patients treated with metformin and dapagliflozin. *Diabetes Obes Metab* 26:2188-2198, 2024 (co-first author)
- Mee Kyoung Kim, Kyu Na Lee, Kyungdo Han, Seung-Hwan Lee*. Diabetes duration, cholesterol levels, and risk of cardiovascular diseases in individuals with type 2 diabetes. *J Clin Endocrinol Metab* In press 2024
- Jeongmin Lee, Jin-Hyung Jung, Dong Woo Kang, Min-Hee Kim, Dong-Jun Lim, Jung Min Lee, Hyuk-Sang Kwon, Sang-Ah Chang, Kyungdo Han*, Seung-Hwan Lee*. Body weight variability and risk of suicide mortality: a nationwide population-based study. *Depress Anxiety* 2024:7670729, 2024

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What is the Best Combination Therapy for KOREAN T2DM Patients?

Seung-Hwan Lee (The Catholic University of Korea, Korea)

The combination therapy of Sodium-Glucose Co-Transporter 2 (SGLT2) inhibitors and Thiazolidinediones (TZDs) offers a multifaceted approach to managing type 2 diabetes mellitus (T2DM). SGLT2 inhibitors reduce blood glucose levels by preventing renal glucose reabsorption, promoting glycosuria. TZDs enhance insulin sensitivity by activating peroxisome proliferator-activated receptor gamma (PPAR- γ), which regulates gene expression involved in glucose and lipid metabolism. This complementary mechanism not only provides superior glycemic control compared to monotherapy but also offers several potential benefits in beta-cell function, insulin resistance, and the prevention of diabetic complications. Clinical evidence suggests that this combination might preserve and possibly improve beta-cell function by reducing glucotoxicity and lipotoxicity, thereby slowing the progression of T2DM. Enhanced insulin sensitivity through TZDs improves peripheral glucose uptake, reducing insulin resistance. Additionally, the dual therapy has shown potential in lowering the risk of diabetic complications, such as cardiovascular disease and nephropathy, due to improved glycemic control and favorable effects on lipid profiles and blood pressure. Overall, the combination therapy of SGLT2 inhibitors and TZDs holds promise for optimizing T2DM management.