Satellite Symposium 2

Chairperson

Changhyun Lee
Seoul Happiness Clinic, Korea

Speaker

Se Hee Min
University of Ulsan, Korea

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• Education

Period	Affiliation	Position
– **2016-2021**	Seoul National University College of Medicine	Ph.D.
– **2014-2016**	Seoul National University College of Medicine	M.S.
– **2005-2011**	Korea University College of Medicine	B.S.

• Affiliations / Experience

Period	Affiliation	Position
– **2021-Present**	Asan Medical Center	Assistant professor
– **2018-2021**	Asan Medical Center	Clinical instructor
– **2016-2018**	Seoul National University Hospital	Fellowship

• Publications

- Duodenal Dual-Wavelength Photobiomodulation Improves Hyperglycemia and Hepatic Parameters with Alteration of Gut Microbiome in Type 2 Diabetes Animal Model, 2023, Cells
- Mitochondrial-encoded MOTS-c prevents pancreatic islet destruction in autoimmune diabetes, 2022, Cell Reports
- Mitohormesis in Hypothalamic POMC Neurons Mediates Regular Exercise-Induced High-Turnover Metabolism. Cell Metabolism. 2021

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Reappraisal of TZD to Control Diabetes: Pioglitazone

Se Hee Min (University of Ulsan, Korea)

Thiazolidinediones (TZDs) are a class of antidiabetic medications that have been subject to reappraisal in recent years due to their complex effects on glycemic control, cardiovascular health, and overall metabolic function. Originally introduced for their insulin-sensitizing properties, TZDs, such as pioglitazone, improve insulin sensitivity in peripheral tissues and reduce hepatic glucose production. However, their association with weight gain, fluid retention, and potential cardiovascular risks has prompted a reevaluation of their role in diabetes management. Recent studies have highlighted the dual effects of TZDs on inflammation and lipid metabolism, suggesting that their benefits may extend beyond glycemic control to include improvements in cardiovascular outcomes and reduced inflammation. Additionally, emerging evidence indicates that the long-term use of TZDs may mitigate the progression of diabetes-related complications. This lecture reviews the current understanding of TZDs in diabetes management, discussing their pharmacological mechanisms, safety profiles, and the clinical implications of their reappraisal. Ultimately, the reexamination of pioglitazone calls for a balanced perspective, recognizing their potential benefits while carefully weighing the risks, thus guiding clinicians in optimizing treatment strategies for patients with type 2 diabetes. Further research is essential to clarify the long-term impact of TZDs on health outcomes in diverse patient populations.