
Neuroprotection of GLP-1RAs and SGLT2i Medications



A new study led by researchers at the University of Florida College of Pharmacy suggests that two widely used glucose-lowering medications may help protect against Alzheimer's disease and related dementias in individuals with Type 2 diabetes.

Published in *JAMA Neurology*, the study analysed data from older adults with Type 2 diabetes to evaluate the association between the use of [glucagon-like peptide-1 receptor agonists](#) (GLP-1RAs) and sodium-glucose cotransporter-2 inhibitors (SGLT2is) and the risk of developing Alzheimer's and related dementias.

Supported by the National Institute on Aging and the National Institute of Diabetes and Digestive and Kidney Diseases, the findings revealed a statistically significant reduction in dementia risk among users of GLP-1RAs and SGLT2is compared with those using other glucose-lowering therapies. The researchers noted that these medications may also offer neuroprotective benefits for people without diabetes and could potentially slow cognitive decline in Alzheimer's patients.

These diabetes medications may have added benefits, such as protecting brain health. Study findings suggest promising potential for these drugs in Alzheimer's prevention, particularly as their use becomes more widespread.

The study evaluated the risk of Alzheimer disease and related dementias (ADRD) among patients using different glucose-lowering drugs (GLDs). It included three cohorts: GLP-1RA vs other GLDs (33,858 patients), SGLT2i vs other GLDs (34,185 patients), and GLP-1RA vs SGLT2i (24,117 patients). After adjusting for baseline differences, both GLP-1RA and SGLT2i initiators had significantly lower ADRD incidence rates compared to other GLD users. However, there was no significant difference in ADRD risk between GLP-1RA and SGLT2i users.

Overall, findings show that in individuals with T2D, both GLP-1RAs and SGLT2is were significantly associated with a reduced risk of ADRD compared to other GLDs, with no significant difference between the two drug classes.

Since the current study focused exclusively on patients with Type 2 diabetes, it is important to expand future research to broader populations using real-world data. Next steps include identifying which patients benefit most and understanding any potential safety concerns.

Source: [University of Florida Health](#)

Image Credit: iStock

Published on : Wed, 23 Apr 2025