



COMMENT ON CELIS-MORALES ET AL.

Type 2 Diabetes, Glycemic Control, and Their Association With Dementia and Its Major Subtypes: Findings From the Swedish National Diabetes Register. *Diabetes Care* 2022;45:634–641

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The risk for Alzheimer disease was lower in patients with type 2 diabetes than in control subjects (hazard ratio 0.94 [95% CI 0.90, 0.99]) but might result in patients with type 2 diabetes dying earlier than control subjects, which was observed by Celis-Morales et al. (1) in a real-world prospective cohort with a large sample of individuals with type 2 diabetes and 7-year follow-up. We recommend that authors incorporate the death event as a competing risk in the Cox regression, which might clarify whether or to what extent type 2 diabetes contributes to the incident Alzheimer disease.

In addition, the authors also observed a dose–response association between

circulating concentration of HbA_{1c} and risk of Alzheimer disease in patients with type 2 diabetes (hazard ratio 1.004 [95% CI 1.001, 1.008]). Considering that more than half (57.8%, 218,702 of 378,299) of patients with type 2 diabetes reached the glycemic targets (HbA_{1c} <7% [53 mmol/mol]) recommended by the American Diabetes Association for non-pregnant adults (2), it is of high importance that we compare the risk of incident Alzheimer disease in adequately controlled patients of type 2 diabetes with that for healthy control subjects. The current opinion indicates that comparing the risk of incident dementia subtypes in patients with type 2 diabetes stratified by glycemic

control would provide further evidence on the benefits of glycemic control.

Duality of Interest. No potential conflicts of interest relevant to this article were reported.

References

1. Celis-Morales CA, Franzén S, Eeg-Olofsson K, et al. Type 2 diabetes, glycemic control, and their association with dementia and its major subtypes: findings from the Swedish National Diabetes Register. *Diabetes Care* 2022;45:634–641
2. American Diabetes Association. 6. Glycemic targets: *Standards of Medical Care in Diabetes—2022*. *Diabetes Care* 2022;45(Suppl. 1):S83–S96

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