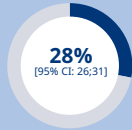


# Stroke Outcomes in Type 2 Diabetes

## Epidemiology of Stroke and Diabetes



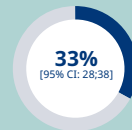
Prevalence of diabetes in stroke inpatients<sup>1</sup>



Diabetes is an independent risk factor for stroke recurrence HR, 1.45 [95% CI: 1.32-1.59]<sup>3</sup>



Prevalence of diabetes in people with ischemic stroke<sup>1</sup>



The HR of having an ischemic stroke is 2.27 [95% CI: 1.95-2.65] in people with diabetes vs without diabetes<sup>2</sup>

## Differences in outcomes for patients with ischemic stroke and diabetes vs without diabetes<sup>4</sup>

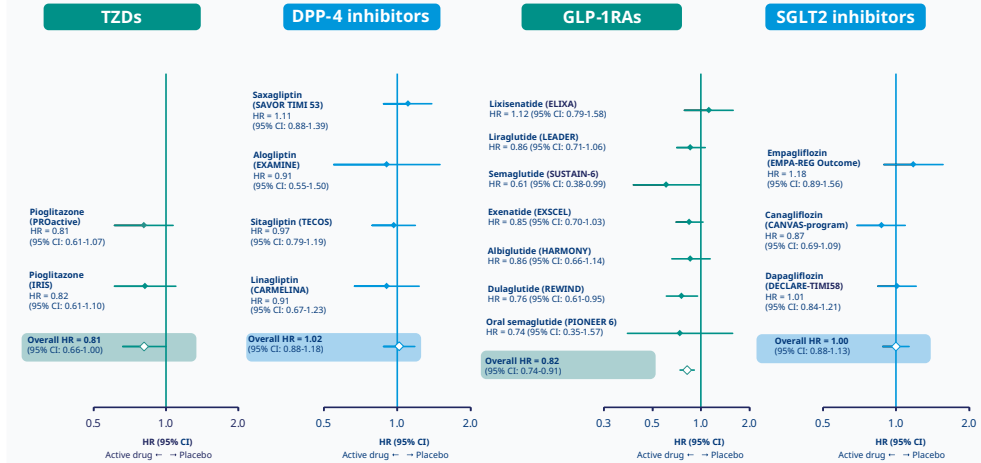
Outcomes	At Three Years	Adjusted HR (95% CI)	P Value
All-cause mortality		1.24 (1.23-1.25)	<.0001
All-cause readmission		1.22 (1.21-1.23)	<.0001
Composite of mortality and all-cause readmission		1.21 (1.20-1.22)	<.0001
Composite of mortality and CV readmission		1.19 (1.18-1.20)	<.0001
IS/TIA readmission		1.18 (1.16-1.20)	<.0001
HF readmission		1.60 (1.56-1.64)	<.0001
Non-CV readmission		1.28 (1.26-1.29)	<.0001

## Poorer outcomes in patients with ischemic stroke and T2D vs without T2D<sup>4</sup>

A1c, glycated hemoglobin; ASCVD, atherosclerotic cardiovascular disease; CI, confidence interval; CV, cardiovascular; CVOT, cardiovascular outcome trial; DPP-4, Dipeptidyl peptidase-4; GLP-1 RA, glucagon-like peptide-1 receptor agonist; HF, heart failure; HR, hazard ratio; IS, ischemia; MACE, major adverse cardiovascular events; MI, myocardial infarction; SGLT2is, sodium glucose like cotransporter 2 inhibitors; T2D, type 2 diabetes; TIA, transient ischemic attack; TZDs, thiazolidinediones.

1. Lau L et al. *J Diabetes Investig* 2019;10:780-92; 2. Sarwar N et al. *Lancet* 2010;375:2215-22; 3. Shou J et al. *J Stroke Cerebrovasc Dis* 2015;24:1961-8; 4. Echouffo-Tcheugui JB et al. *Eur Heart J* 2018;39:2376-86; 5. Lim, et al. *Diabetes Obes Metab*. 2020;22:6-15; 6. Kleindorfer DO et al. A guideline from the American Heart Association/American Stroke Association. *Stroke*. 2021; STR-0000000000000375.

## Stroke Outcomes in Diabetes CVOTs<sup>5</sup>



## Summary

- Stroke is a significant cause of mortality worldwide, and diabetes is an independent risk factor for ischemic stroke occurrence and recurrence.
- In response to the development of new classes of glucose-lowering medications that also prevent clinical vascular disease, several professional organizations have revised their algorithms for the management of T2D.<sup>6</sup>
- Future clinical and RWE research will clarify the role of GLP-1RAs in stroke prevention.

