

Be Familiar With Tenecteplase for Acute Ischemic Stroke

You'll hear buzz about the **thrombolytic tenecteplase (TNKase)** now that it's approved by Health Canada for **treating acute ischemic stroke**.

This adds to the uses for tenecteplase, since it's already approved for patients with a heart attack caused by a blood clot.

Patients with an acute ischemic stroke usually receive alteplase to restore blood flow...as long as it's within 4.5 hours of symptom onset and there are no contraindications, such as an intracranial bleed.

But now tenecteplase is another option for these patients.

It has comparable efficacy to alteplase for restoring blood flow and improving survival after a stroke...with similar risks and safety.

And it's easier to give. Tenecteplase has a longer half-life than alteplase, so it can be given as a single IV bolus injection over 5 seconds...instead of a 60-min infusion with alteplase.

But it still has the same time constraint of needing to be given within 4.5 hours of symptom onset.

Expect alteplase to still be used for acute ischemic stroke, since it has more overall evidence. But tenecteplase will increase in popularity due to its easier administration.

Identify stroke patients by looking for discharge Rx's during transitions of care...and help ensure these patients get the right meds to prevent recurrent stroke.

For example, expect to see patients discharged on one or two antithrombotics after an acute stroke. But most patients will only need ONE med continued long-term...usually aspirin.

For blood pressure, expect most patients to start with two first-line BP meds...combining lower doses of drugs from different classes provides additive BP control while minimizing side effects.

For example, patients may get an ACEI or ARB plus a long-acting CCB or thiazide diuretic...to lower BP and reduce CV risk.

Most patients will also start a statin...regardless of their cholesterol level.

Find ways to help patients stick with meds...such as with smartphone apps, refill reminders, or pillboxes.

Review our resource, *Antiplatelets for Recurrent Ischemic Stroke*, for more on preferred meds and dosing.

Key References:

- Meng X, Li S, Dai H, et al. Tenecteplase vs Alteplase for Patients With Acute Ischemic Stroke: The ORIGINAL Randomized Clinical Trial. JAMA. 2024 Nov 5;332(17):1437-1445.
- Xiong Y, Wang L, Li G, et al. Tenecteplase versus alteplase for acute ischaemic stroke: a meta-analysis of phase III randomised trials. Stroke Vasc Neurol. 2024 Aug 27;9(4):360-366.
- Warach SJ, Dula AN, Milling TJ Jr. Tenecteplase Thrombolysis for Acute Ischemic Stroke. Stroke. 2020 Nov;51(11):3440-3451.
- Thrombosis Canada. Ischemic Stroke or TIA: Secondary Prevention. July 21, 2025. https://thrombosiscanada.ca/clinical_guides/pdfs/80_40.pdf (Accessed January 5, 2026).
- Thrombosis Canada. Stroke: Thrombolysis and Endovascular Therapy. August 18, 2025.

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https://thrombosiscanada.ca/hcp/practice/clinical_guides?language=en-ca&guideID=THROMBOLYTICTHERAPYINACUTEISCH (Accessed January 5, 2026).

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