

OPTION Trial Podcast – Word-for-Word Transcript

Welcome to our overview of advances in acute stroke treatment, focusing on the OPTION trial—an investigation led by Junwei Hao and Ran MO, addressing intravenous tenecteplase for non-large vessel occlusion stroke in the extended window.

Absolutely. This document provides critical insights into whether late thrombolysis can be both safe and effective, especially for patients outside the traditional treatment window.

The main purpose is clear: the trial tests tenecteplase against standard medical care, using perfusion imaging to select those with salvageable brain tissue.

Its scope includes everything from trial rationale and design, to outcomes, guidance, and limitations. Most importantly, it proposes a thesis: that eligibility for thrombolysis can be safely extended, potentially improving outcomes for many.

To begin, non-large vessel occlusion strokes account for over half of ischemic strokes, but late intravenous thrombolysis has lacked robust data. The OPTION trial addresses this gap, building on successes with late window IVT for large vessel occlusions.

The trial's multicenter, randomized, open-label, blinded endpoint design stands out. Selection criteria included disabling stroke within 4.5 to 24 hours, confirmed non-LVO, and evidence of salvageable tissue using CT perfusion imaging.

Outcomes were rigorously measured: the primary endpoint was excellent functional result at 90 days, defined as a modified Rankin Scale score of zero to one. Secondary measures included infarct volumes, clinical responses, and safety endpoints like intracranial hemorrhage.

Key findings reveal tenecteplase led to a significantly higher proportion of excellent outcomes—forty three point six percent versus thirty four point two percent for standard care. Adjusted risk ratio was one point three two, underscoring meaningful benefit.

However, a notable increase in symptomatic intracranial hemorrhage highlights the need for careful patient selection and precise imaging review. Safety remains a critical factor.

Ultimately, the OPTION trial supports extending thrombolysis for non-LVO stroke with salvageable tissue, offering actionable guidance while encouraging individualized decisions and future research.

In summary, this study establishes a foundation for broader thrombolysis eligibility in acute stroke care, with vital considerations around safety and patient selection.

Thanks for joining us for this concise overview of the OPTION trial. We hope these insights help guide your interpretation and clinical practice.