

New AHA/ASA Stroke Guideline and the Practical Impact for Neurointerventionalists

Reviewing the new guideline through five practice points.

By Basel Musmar, MD, and Stavropoula I. Tjoumakaris, MD, MBA

The recently published “2026 Guideline for the Early Management of Patients With Acute Ischemic Stroke” from the American Heart Association/American Stroke Association (AHA/ASA) brings several updates with direct impact on neurointerventional practice.¹ The most important shift is not simply that new data have been added; it is that the overall framework has become more practical, more workflow-conscious, and more willing to extend reperfusion therapies to carefully selected patients who would previously have been excluded. For neurointerventionalists, the new guidelines are not only about whether a vessel is occluded or if the patient arrives within a classic time window. Also important is how quickly treatment can begin, how much imaging is actually needed before action, how far thrombectomy candidacy should extend, and how patients should be managed once reperfusion has been achieved.

A useful way to read the guidelines is through five practice points. First, tenecteplase is now firmly established as a frontline thrombolytic option. Second, the guideline reinforces speed and specifically warns against avoidable imaging-related delay in clearly eligible patients. Third, endovascular thrombectomy (EVT) eligibility has expanded further into large-core stroke and select patients with prestroke disability. Fourth, basilar artery occlusion now has firm endovascular treatment options. Fifth, stroke systems of care and postreperfusion management should be built around measured performance rather than instinct, especially with respect to interhospital transfer and blood pressure control.



Tenecteplase Is Now a True Frontline Thrombolytic

One of the clearest changes in the guideline is the recommendation that eligible adults presenting within 4.5 hours of symptom onset or last known well may receive either tenecteplase at a dose of 0.25 mg/kg up to 25 mg or alteplase at a dose of 0.9 mg/kg to improve functional outcomes.

The practical relevance is obvious for stroke systems that are increasingly built around rapid transfer and rapid transition from the emergency department to the angiography suite. Tenecteplase is delivered as a single intravenous (IV) bolus, while alteplase requires a bolus followed by a 1-hour infusion. In day-to-day neurointerventional practice, that difference matters. A single-bolus drug is easier to administer, easier to transport with, and easier to integrate into parallel thrombectomy activation. It reduces treatment complexity during handoff between teams and may reduce opportunities for delay.

The guideline is also appropriately disciplined about dose. Tenecteplase at 0.4 mg/kg is not recommended because it does not improve outcomes and may cause harm. This point is important because it emphasizes adherence to the evidence-based dose that actually earned support in the guideline.

Tenecteplase is now a practical frontline reperfusion option that fits modern endovascular workflow extremely well. The preferred system is one in which IV thrombolysis and thrombectomy planning occur in parallel, not in sequence.

02

The Guideline Clearly Prioritizes Speed and Warns Against Unnecessary Imaging Delay

The new guideline strongly states that in adults who are eligible for IV thrombolysis within 4.5 hours, treatment should be initiated as quickly as possible while avoiding delays associated with additional multimodal neuroimaging such as CTA, MRA, CT perfusion, or MR perfusion.

Advanced imaging has transformed stroke care, but it has also introduced the risk of overuse. The guideline does not argue against advanced imaging. Rather, it makes clear that advanced imaging should be used when it meaningfully changes management, not when it simply slows the start of effective treatment. This is especially important in patients with disabling deficits. The recommendation is explicit that in adult patients with acute ischemic stroke and disabling deficits, faster IV thrombolytic treatment improves outcomes regardless of National Institutes of Health Stroke Scale (NIHSS) score.

That is highly relevant to neurointerventionalists because some of the most difficult early cases are the ones that look “mild” on paper but are clearly disabling in real life. A patient with isolated aphasia, disabling hemianopia, severe gait impairment, or loss of dominant hand function may not have a dramatic NIHSS score, but still has a functionally devastating stroke. The new guideline appropriately shifts the focus back to disability rather than score alone.

The same section also supports an extended-window approach for selected patients with stroke of unknown onset or 4.5 to 9 hours from last known well when advanced imaging identifies salvageable tissue. That recommendation reflects how imaging should be used best. It should expand treatment in carefully selected settings. It should not delay treatment when the patient is already clearly eligible.

03

EVT Eligibility Has Expanded Into Large-Core Stroke and Selected Prestroke Disability

The major endovascular shift in the guideline is the broader EVT population. Standard early window anterior circulation thrombectomy remains strongly recommended for proximal internal carotid artery (ICA) or M1 occlusion within 6 hours in patients with NIHSS score ≥ 6 , prestroke modified Rankin Scale (mRS) 0 to 1, and Alberta Stroke Program Early CT Score (ASPECTS) 3 to 10. That foundation remains

intact. What is new is how far the guideline now extends thrombectomy candidacy beyond older historical boundaries.

For select patients with anterior circulation proximal ICA or M1 occlusion presenting between 6 and 24 hours, age < 80 years, NIHSS score ≥ 6 , prestroke mRS 0 to 1, ASPECTS 3 to 5, and no significant mass effect, EVT is now recommended to improve functional outcomes and reduce mortality. In select patients within 6 hours, EVT is also considered reasonable even with ASPECTS 0 to 2 when age is < 80 years, NIHSS score is ≥ 6 , prestroke mRS is 0 to 1, and there is no significant mass effect. In addition, the guideline now states that EVT is reasonable in select patients with early window anterior circulation large vessel occlusion (LVO) and prestroke mRS 2.

Neurointerventionalists can no longer rely on older exclusion habits that treated large ischemic cores or mild baseline disability as automatic reasons not to intervene. The newer evidence supports a more nuanced approach that considers infarct burden, age, mass effect, prestroke function, and expected disability together.

Patients with large-core infarction have a lower absolute rate of functional independence than traditional smaller-core thrombectomy populations, but that does not mean the treatment effect is absent. It means benefit should be framed realistically. Families should be told that prognosis remains guarded, while also making clear that selected patients may still derive meaningful benefit from thrombectomy in both functional outcome and survival.

04

Basilar Artery Occlusion Now Has Firm Endovascular Options

Posterior circulation thrombectomy has long been one of the most debated areas in the field. The new guideline moves this issue closer to clarity. In patients with basilar artery occlusion, baseline mRS 0 to 1, NIHSS score ≥ 10 , and posterior circulation ASPECTS (PC-ASPECTS) ≥ 6 , EVT within 24 hours is recommended to achieve better functional outcome and reduce mortality.

Basilar artery occlusion should now be viewed less as an uncertain or discretionary thrombectomy scenario and more as a true endovascular emergency when the clinical and imaging criteria are met. The evidence base is stronger than it was in prior years, and the recommendation reflects that.

The guidelines note that the effectiveness of EVT is not well established in basilar artery occlusion patients

with lower presenting NIHSS scores (specifically 6-9), even when PC-ASPECTS is favorable. That is an important distinction. The practical implication is that basilar artery occlusion now deserves more thoughtful action in some patients (high NIHSS scores), while still requiring clinical judgment in less clearly defined subgroups.

05

Systems of Care and Postreperfusion Management Should Be Driven by Performance

In areas with well-coordinated systems of stroke care and local hospitals that are proficient in thrombolysis delivery and secondary interhospital transfer, direct transport of suspected LVO patients to a distant thrombectomy-capable stroke center does not improve 3-month outcomes compared with transport to a local stroke center. At the same time, hospitals and emergency medical services agencies should establish agreements and protocols that prioritize rapid transfer of patients needing a higher level of care to reduce door-in-door-out times.

A fast local stroke center with excellent thrombolysis processes and efficient transfer capability may outperform a bypass strategy if the alternative adds substantial transport delay. Conversely, in regions where transfer is slow or unreliable, direct routing to a thrombectomy-capable center may be the better approach. The question is not which model sounds best but rather which model actually gets reperfusion done faster.

The guideline also emphasizes that EVT-capable hospitals should track key thrombectomy metrics such as door-to-puncture time, successful reperfusion, and long-term outcomes, and that neurointerventionalists should be credentialed according to established training and certification standards. These recommendations reflect an important reality. High-quality thrombectomy care is no longer defined only by technical ability. It is also defined by measurable system performance.

Finally, one of the most clinically useful updates in the entire document concerns blood pressure management after reperfusion. The guideline states that in patients treated with IV thrombolysis, intensive systolic blood pressure reduction to < 140 mm Hg does not improve functional outcome. In patients with anterior circulation LVO who have been successfully recanalized

by EVT, intensive systolic blood pressure reduction to < 140 mm Hg during the first 72 hours is harmful and not recommended. Many teams have historically felt pressure to push blood pressure lower after reperfusion, especially after excellent angiographic results. The new guideline pushes back against that instinct. For neurointerventionalists, the message is to favor stability over aggressive overcorrection.

CONCLUSION

The 2026 AHA/ASA acute ischemic stroke guideline gives neurointerventionalists a more modern framework for acute stroke care. Tenecteplase has become a practical frontline thrombolytic that fits contemporary stroke workflow well. IV thrombolysis should not be delayed for unnecessary additional imaging in clearly eligible patients. EVT candidacy has expanded meaningfully into large-core stroke and select patients with prestroke disability. Basilar artery occlusion now carries a stronger and more definitive thrombectomy signal. Regional stroke systems should be designed around measured treatment speed and transfer efficiency. Postreperfusion blood pressure management should be disciplined rather than aggressively lowered by reflex. Taken together, these changes both refine acute stroke management and move the field toward a faster, more selective, and more realistic model of neurointerventional practice. ■

1. Prabhakaran S, Gonzalez NR, Zachrisson KS, et al. 2026 guideline for the early management of patients with acute ischemic stroke: a guideline from the American Heart Association/American Stroke Association. *Stroke*. Published online January 26, 2026. doi: 10.1161/STR.0000000000000513

Basel Musmar, MD

Department of Neurological Surgery
Thomas Jefferson University Hospital
Philadelphia, Pennsylvania
basel.musmar@jefferson.edu

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Stavropoula I. Tjoumakaris, MD, MBA

Department of Neurological Surgery
Thomas Jefferson University Hospital
Philadelphia, Pennsylvania
stavropoula.tjoumakaris@jefferson.edu
Disclosures: Consultant to MicroVention and Medtronic.