ACUTE ISCHEMIC STROKE - Practical Quick Reference (2026)

American Heart Association / American Stroke Association (AHA/ASA) 2026 Guideline
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⏱ Time Targets (System Goals)

Milestone	Target
Door → CT (Computed Tomography)	≤ 25 min
Door → Needle (Intravenous Thrombolysis, IVT)	≤ 60 min
Door → Groin (Endovascular Therapy, EVT)	≤ 90 min

Principle: Imaging-guided decisions + minimize delay

IV Thrombolysis (IVT ≤ 4.5 Hours)

Drug	Dose	Administration
Alteplase (rtPA)	0.9 mg/kg (max 90 mg)	10% bolus → infusion over 60 min
Tenecteplase (TNK)	0.25 mg/kg (max 25 mg)	Single IV bolus

✅ **Alteplase OR Tenecteplase → both guideline-endorsed options (Class I for IVT overall)**
➡️ TNK often **favored in LVO / transfer scenarios** (single bolus, workflow advantage)

⚠️ TNK stroke dose ≠ STEMI dose

Thrombolysis Eligibility

✅ **Include**

- Disabling neurologic deficit
- Onset ≤ 4.5 h
- No hemorrhage on CT
- BP < 185/110 mmHg

❌ **Exclude (core)**

- Intracranial hemorrhage (ICH)
- Recent ICH or major surgery (< 3 months)
- Platelets < 100,000/μL
- INR > 1.7
- Active bleeding

⚠️ Consider: DOAC timing / anti-Xa activity

❌ **Non-disabling deficit**

→ IVT **not beneficial**
→ Prefer **Dual Antiplatelet Therapy (DAPT)**

Extended Window Thrombolysis

Scenario	Recommendation	Requirement
4.5–9 h	Reasonable (Class IIa)	CT/MRI perfusion mismatch
Wake-up stroke	Reasonable (Class IIa)	DWI–FLAIR mismatch

Key concept: Imaging-based selection (not time alone)

Mechanical Thrombectomy (EVT)

0–6 Hours → Class I

- LVO (ICA / M1 segment)
- NIHSS ≥ 6
- ASPECTS ≥ 6

6–24 Hours → Expanded Eligibility

- Imaging-based selection (core–penumbra mismatch)
- Criteria **less restrictive than earlier guidelines**

NEW Basilar Artery Occlusion → Class I

- EVT ≤ 24 h
- NIHSS ≥ 10
- **Requires appropriate imaging selection (not automatic for all)**

Large-Core Infarct

- **No longer absolute exclusion**
- EVT **may benefit selected patients** (individualized decision)

Bridging Strategy

- If IVT + EVT indicated → **give IVT first (no delay)**

- TNK often preferred in transfer scenarios

⚠️ Direct EVT without IVT → **may be considered in selected cases** (not routine)

Blood Pressure Targets

Situation	Target
Before IVT	< 185/110 mmHg
After IVT (first 24 h)	< 180/105 mmHg
After EVT	**< 180 mmHg (individualized; avoid SBP < 140)**
No IVT / No EVT	≤ 220/120 mmHg (permissive hypertension)

⚠️ **Do NOT lower SBP < 140 mmHg early (harm signal)**

Immediate General Care

Parameter	Target / Action
Glucose	140–180 mg/dL
Oxygen	Only if SpO_2 < 94%
Temperature	Treat fever > 37.5°C

Parameter	Target / Action
Swallowing	Screen before oral intake (NPO)
DVT prophylaxis	Intermittent pneumatic compression

Antiplatelet Therapy

- Start after ≥ 24 h + repeat imaging (exclude hemorrhage)
- Aspirin: 160–325 mg

Key Clinical Pearls

- Imaging > time (major paradigm shift)
- TNK simplifies workflow (single bolus)
- EVT expanded — including large-core & basilar occlusion
- **Do NOT delay EVT for IVT**
- Avoid over-aggressive BP reduction — especially post-EVT