### Eligibility criteria for tPA (alteplase)

#### Inclusion criteria
- Clinical diagnosis of ischemic stroke causing measurable neurologic deficit
- Onset of symptoms <4.5 hours before beginning treatment; if the exact time of stroke onset is not known, it is defined as the last time the patient was known to be normal
- Age ≥18 years

#### Exclusion criteria

##### Historical
- Significant stroke or head trauma in the previous three months
- Previous intracranial hemorrhage
- Intracranial neoplasm, arteriovenous malformation, or aneurysm
- Recent intracranial or intraspinal surgery
- Arterial puncture at a noncompressible site in the previous seven days

##### Clinical
- Symptoms suggestive of subarachnoid hemorrhage
- Persistent blood pressure elevation (systolic ≥185 mmHg or diastolic ≥110 mmHg)
- Serum glucose <50 mg/dL (<2.8 mmol/L)
- Active internal bleeding
- Acute bleeding diathesis, including but not limited to conditions defined in 'Hematologic'

##### Hematologic
- Platelet count <100,000/mm$^3$
- Current anticoagulant use with an INR >1.7 or PT >15 seconds
- Heparin use within 48 hours and an abnormally elevated aPTT
- Current use of a direct thrombin inhibitor or direct factor Xa inhibitor with evidence of anticoagulant effect by laboratory tests such as aPTT, INR, ECT, TT, or appropriate factor Xa activity assays

##### Head CT scan
- Evidence of hemorrhage
- Extensive regions of obvious hypodensity consistent with irreversible injury

#### Relative exclusion criteria
- Only minor and isolated neurologic signs
- Rapidly improving stroke symptoms
- Major surgery or serious trauma in the previous 14 days
- Gastrointestinal or urinary tract bleeding in the previous 21 days
- Myocardial infarction in the previous three months
- Seizure at the onset of stroke with postictal neurologic impairments
- Pregnancy

#### Additional relative exclusion criteria for treatment from 3 to 4.5 hours from symptom onset
- Age >80 years
- Oral anticoagulant use regardless of INR
- Severe stroke (NIHSS score >25)
- Combination of both previous ischemic stroke and diabetes mellitus
aPTT: activated partial thromboplastin time; ECT: ecarin clotting time; INR: international normalized ratio; PT: prothrombin time; NIHSS: National Institutes of Health Stroke Scale; TT: thrombin time.

* Although it is desirable to know the results of these tests, thrombolytic therapy should not be delayed while results are pending unless (1) there is clinical suspicion of a bleeding abnormality or thrombocytopenia, (2) the patient is currently on or has recently received anticoagulants (eg, heparin, warfarin, a direct thrombin inhibitor, or a direct factor Xa inhibitor), (3) use of anticoagulants is not known. For patients without recent use of oral anticoagulants or heparin, treatment with intravenous tPA can be started before availability of coagulation test results but should be discontinued if the INR, PT, or aPTT exceed the limits stated in the table.

¶ The available data suggest that under some circumstances—with careful consideration and weighting of risk-to-benefit—patients may receive fibrinolytic therapy despite one or more relative contraindications. In particular, there is now consensus that patients who have a persistent neurologic deficit that is potentially disabling, despite improvement of any degree, should be treated with tPA in the absence of other contraindications. Any of the following should be considered disabling deficits:

- Complete hemianopsia: ≥2 on NIHSS question 3, or
- Severe aphasia: ≥2 on NIHSS question 9, or
- Visual or sensory extinction: ≥1 on NIHSS question 11, or
- Any weakness limiting sustained effort against gravity: ≥2 on NIHSS question 5 or 6, or
- Any deficits that lead to a total NIHSS >5, or
- Any remaining deficit considered potentially disabling in the view of the patient and the treating practitioner using clinical judgement.

Adapted from: