

Thrombolytic Competency Checklist
t-PA: Alteplase for Stroke

Participant Name _____ Date _____

Case Scenario: 55 y/o female presents to the emergency room with sudden onset right-sided facial weakness, slurred speech, and right arm weakness. She also has partial vision loss in the right eye. She has a history of hypertension, diabetes and hyperlipidemia. Non-Contrast Head CT shows no acute findings or bleeding. Based on evaluation and assessment, she meets criteria for thrombolytic therapy for acute ischemic stroke. She weighs 72 kg. Begin discussion and planning for treatment.

Performance Guidelines	Passed	Remediate
1. Confirms “time last known normal”		
2. Evaluates glycemic status		
3. Reviews hemo-dynamics		
4. Reviews history and physical		
5. Clarifies physical findings at onset and compares to current physical findings (evaluating symptom progression using the NIHSS)		
6. Identify Patient Selection		
• Presented within 3 hours of symptom onset		
• Baseline non-contrast head CT excludes hemorrhage and other risk factors		
• Patient’s history does not reveal contraindications		
• 18 years of age or older		
7. States contra-indications to thrombolytic therapy		
• Evidence of intra-cranial hemorrhage on pre-treatment evaluation		
• Suspicion of sub-arachnoid hemorrhage		
• Serious head trauma trauma, recent previous stroke, or heart attack within 3 months		
• History of intracranial hemorrhage		
• Uncontrolled hypertension at time of treatment(eg > 185mm Hg systolic or > 110 mm Hg diastolic)		
• Seizure at onset of stroke		
• Active bleeding or acute trauma		
• Intracranial neoplasm, arteriovenous malformation or aneurysm		

Performance Guidelines	Passed	Remediate
<ul style="list-style-type: none"> • Known bleeding diathesis, including but not limited to: 		
<ul style="list-style-type: none"> • Current use of oral anticoagulants (eg Coumadin) with a prothrombin time (PT) > 15 seconds or INR > 1.7 		
<ul style="list-style-type: none"> • Administration of heparin within 48 hours preceding the onset of stroke and elevated activated partial thromboplastic time (PTT) at presentation 		
<ul style="list-style-type: none"> • Platelet count < 100,000 / mm 		
<ul style="list-style-type: none"> • Major surgery within 14 days 		
<ul style="list-style-type: none"> • Gastro-Intestinal or Gynecological Urinary bleeding within 14 days 		
<ul style="list-style-type: none"> • Myocardial Infarction (MI) within 3 months 		
<p>Recognize Precautions/Warnings:</p> <ul style="list-style-type: none"> • Patients with severe neurological deficit (eg NIH Stroke Scale > 22) at presentation. There is an increased risk of intra-cranial hemorrhage in these patients. • Patients with major early infarct signs on a computed tomography (CT) scan (eg. 1/3 of middle cerebral artery territory affected, substantial edema, mass effect or midline shift). 		

Critical Actions	Passed	Remediate
8. States mg/kg alteplase dosing for total dosage		
9. Configures alteplase bolus dose		
10. Configures alteplase hourly dose		
11. Illustrates knowledge of medication infusion pump: Selects alteplase CVA guardrail		
12. Programs infusion pump for bolus infusion using safety guardrails		
13. Programs infusion pump for hourly infusion using safety guardrails		
14. Performs Time Out prior to start of infusion		
14. Verbalizes critical elements of assessment and the frequency of those elements during administration::		
<ul style="list-style-type: none"> • Blood pressure, NIHSS, Signs & symptoms of bleeding 		
15. Indicate actions to be taken in the event of declining status during alteplase administration		

