

Ischemic Stroke Alteplase Intravenous Administration Orders

- ☐ Admit to: ☐ MICU ☐ Stroke Unit/Neuro Step-down Unit **Attending:** _____ **Diagnosis:** _____
Secondary diagnoses: _____ **Allergies:** _____ **Weight:** _____
- ☐ Patient/family informed of benefits and risks of Alteplase including symptomatic intracranial hemorrhage rate of 6.4%.
☐ Symptom onset between 3 to 4.5 hours: **Consent obtained from patient/family**

CONTRAINDICATIONS to ALTEPLASE: (Check box if applicable)		WARNINGS
<input type="checkbox"/> Evidence of ICH on pre-treatment CT <input type="checkbox"/> SBP > 185 or DBP > 110 mmHg, despite treatment <input type="checkbox"/> Suspicion of subarachnoid hemorrhage <input type="checkbox"/> History of intracranial hemorrhage <input type="checkbox"/> Known arteriovenous malformation or aneurysm <input type="checkbox"/> Active internal bleeding <input type="checkbox"/> Platelets <100,000; PTT > 40 sec after heparin use, or PT > 15 or INR > 1.7 or known bleeding diathesis	<input type="checkbox"/> History of intracranial or spinal surgery, head trauma, or stroke (< 3 months) <input type="checkbox"/> Recent major surgery or trauma [excluding head trauma] (< 15 days) <input type="checkbox"/> Recent arterial puncture at non-compressible site	<input type="checkbox"/> Glucose < 50 or > 400 mg/dl <input type="checkbox"/> Seizure at onset of stroke symptoms <input type="checkbox"/> Increased risk of bleeding due to co-morbidities <input type="checkbox"/> Life expectancy < 1 year or severe co-morbid illness or Comfort Measures Only on admission <input type="checkbox"/> Rapid improvement or stroke severity too mild <input type="checkbox"/> Recent lumbar puncture (<7 days)

Alteplase (Activase®) Initiation Order	WARNINGS
<input type="checkbox"/> 100 mg/100 mL sterile water IV infusion x 1 dose Total dose: 0.9 mg/kg x _____ kg = _____ mg Bolus: (10% of total dose): _____ mg IV over 1 minute via smart infusion pump (Max: 9 mg) Infusion: (90% of total dose): _____ mg IV over 60 minutes via smart infusion pump (Max: 81 mg)	<p>[Note: do NOT use cardiac dosing] (Note: do NOT exceed a Total dose of 90 mg)</p> <p>For suspected bleeding complication/deterioration of neuro status:</p> <ul style="list-style-type: none"> Stop infusion immediately, Notify MD Stat Stat Head CT to R/O intracranial hemorrhage Obtain CBC, platelet count, INR, PT, PTT, fibrinogen, D-dimer, glucose, BUN, creatinine Plan for blood and blood products transfusion: RBC, cryoprecipitate, platelets

Vital Signs Assessment Every:	BP Parameter Goal	Notify MD (917) 760 - 1568 for:
Q 15 minutes x 2 hours	Pre-Alteplase: < 185/110 mmHg	BP >185/110 mmHg during t-PA infusion
Q 30 minutes x 6 hours		and
Q hour x 16 hours	Post -Alteplase: <180/105 mmHg	SBP < 100 mmHg

BP Management: SBP >180mmHg and/or DBP >105mmHg:	If HR < 60: (Select ONE of the following)
IV Bolus: <input type="checkbox"/> Labetalol _____ mg IV Push, repeat q 10 min x _____ dose(s) then start Labetalol continuous infusion as indicated below (HOLD if HR < 60)	<input type="checkbox"/> Enalaprilat _____ mg IV Push x 1 dose, then begin Nicardipine OR Nitroprusside continuous infusion as indicated below <input type="checkbox"/> Hydralazine _____ mg IV Push q 20 min x _____ dose(s), then begin Nicardipine OR Nitroprusside continuous infusion as indicated below

Continuous infusion orders: valid x 24 hrs, once continuous infusion management begins, DISCONTINUE bolus management

Medication	Standard Dilution	Choose Diluent	Start at	Goal Parameters	Recommended Titration Range
Labetalol (TRANDATE®)	<input type="checkbox"/> 1:1 = 300 mg/300 mL	NS	_____ mg/min	SBP < 185 HOLD if HR < 60	0.25-3 mg/min (titrate)
Nicardipine (CARDENE®)	<input type="checkbox"/> 20 mg/200 mL (premix)	NS	_____ mg/hr	SBP < 185	Initial: 5 mg/hr, increase by 2.5 mg/hr to maximum dose 15 mg/hr
Nitroprusside (NIPRIDE®)	<input type="checkbox"/> 100 mg/250 mL	D5W	_____ mcg/kg/min	SBP < 185	0.5-10 mcg/kg/min (titrate)

MD Name: _____ MD Signature: _____

RN Name: _____ RN Signature: _____

Date/Time: _____

Date/Time: _____

Blood Glucose: Fingertstick every 6 hours • Treat glucose > 150 mg/dL:		NEURO CHECKS	
Regular Insulin Sliding Scale SQ x 24 hrs for FS:		<ul style="list-style-type: none"> q 30 minutes x 1 hour, then q 2 hours x 23 hours 	
151 – 200mg/dL	GIVE 2 units	<ul style="list-style-type: none"> Notify physician if there are any changes in neuro status or patient experiences a NEW severe headache 	
201 – 250mg/dL	GIVE 4 units		
251 – 300mg/dL	GIVE 6 units		
301 – 350mg/dL	GIVE 8 units		
351 – 400mg/dL	GIVE 10 units		
> 400mg/dL	GIVE 12 units & NOTIFY MD	Temperature q 4 hours <ul style="list-style-type: none"> Acetaminophen 650 mg PO q 4 hours PRN Temp > 99 F , if pt unable to swallow administer PR x 24 hrs Cooling blanket to keep temp <98.0 ° F 	

1. Other Monitoring:

- NIHSS score after completion of alteplase infusion by physician (or Stroke Unit nurse if patient in Stroke Unit)
- Strict I & O's, notify physician if urine output less than _____ mL every 4 hours
- Cardiac and O₂ Sat monitoring:

2. Respiratory Therapy:

- ☐ O₂ at _____ liters per _____ ☐ nasal canula ☐ non re-breather mask
- ☐ Initiate RT O₂ Protocol; keep O₂ Sat ≥ 95%.
 - Notify physician if
 - Patient requires O₂ > 5L/min via NC
 - O₂ Sat <92% (always refer to patient's oxygenation history)
- ☐ Ventilator Management Protocol, when required

3. Diet/IV Fluids:

- ☐ Strict NPO (no meds) and water swallow assessment
- ☐ NPO, but can take oral meds if cleared to swallow by physician
- IVF: Normal Saline @ _____ mL/hr

4. No aspirin, heparin, enoxaparin, warfarin, or other anticoagulant or antiplatelet agents for 24 hours

5. Avoid bladder catheterization and nasogastric tubes for 24 hours, if not placed prior to Alteplase infusion

6. No central lines, arterial punctures IVs or veni-puncture from hemi-paretic limb, other invasive procedures for 24 hours

7. Monitor for bleeding from puncture sites, urine, stool, emesis, other x 48 hrs.

8. Activity:

- Strict bed rest
- Keep head of bed 0-30° (ideally at 0° to maintain cerebral perfusion, if patient cannot tolerate can go up to 30°)
- Reposition every 2 hours

MD Name: _____ **MD Signature:** _____ **Date/Time:** _____

RN Name: _____ **RN Signature:** _____ **Date/Time:** _____