THROMBOLYSIS GUIDELINES*

Indications for thrombolysis – Confirmed STEMI with none of the following:

- Contraindications to Thrombolysis
- Primary Angioplasty Possible within 90 minutes for patients transported directly to STEMI Receiving Center or within 120 minutes for patients requiring inter-hospital transfer
- Cardiogenic Shock
- Increased Bleeding Risk
- Symptom Onset > 3 Hours
- Unclear Diagnosis

Contraindications to thrombolysis:

**Absolute Contraindications**

- Any prior intracranial hemorrhage
- Known structural cerebrovascular lesion (e.g. arteriovenous malformation)
- Known intracranial neoplasm (primary or metastatic)
- Ischemic stroke within three months (except acute ischemic stroke within 4.5 hours)
- Suspected aortic dissections
- Active bleeding or bleeding diathesis (excluding menses)
- Significant closed-head or facial trauma within three months
- Intracranial or intraspinal surgery within two months
- Severe uncontrolled hypertension (unresponsive to emergency therapy)
- For streptokinase, prior treatment within previous six months.

**Relative Contraindications**

- History of chronic severe, poorly controlled hypertension
- Significant hypertension on presentation (SBP >180 mmHg or DBP >110 mmHg)
- History of ischemic stroke greater than 3 months prior
- Dementia
- Known intracranial pathology not covered in absolute contraindications
- Traumatic or prolonged (>10minutes) CPR
- Major Surgery within preceding 3 weeks
- Recent (within 2-4 weeks) internal bleeding
- Non-compressible vascular punctures
- Pregnancy
- Active Peptic Ulcer
- Current use of anti-coagulants; the higher the INR, the higher risk of bleeding.

1. **Aspirin** 325 mg PO or PR x1
2. **NTG** titrated to chest pain and blood pressure.
3. **Cardiac Monitor, Oxygen** for O2 saturation <94%, IV with normal saline
4. **Thrombolytic** dosing:
   - **TNKase**: Single bolus, weight based:
     - < 60 kg = 30mg
     - 60-69 kg = 35 mg
     - 70-79kg = 40 mg
     - 80-89 kg = 45 mg
     - 90 kg = 50 mg
   - **OR**
   - **Reteplase**: Double bolus
     - 10 units IV over 2 minutes followed by second bolus of 10 units IV thirty minutes later.
   - **OR**
   - **Alteplase**:
     - 15 mg IV bolus followed by 0.75 mg/kg (up to 50 mg) IV over 30 minutes then 0.5 mg/kg (up to 35 mg) IV over 60 minutes.
     - Maximum total dose is 100 mg.
   - **OR**
   - **Streptokinase** (if not received within prior six months):
     - 1.5 million units IV over 30-60 minutes.
5. **Clopidogrel**:  
   - 300 mg PO x1 if ≤75 years of age
   - 75mg PO x1 if >75 years of age
6. **Anticoagulants**:
   - **Unfractionated heparin** 60 units/kg bolus (Max 4000 units) and 12 units/kg/hr infusion (Max 1,000 units/hr)
   - **OR**
   - **Enoxaparin** 30 mg IV if ≤75 years of age.
   - **OR**
   - **Fondaparinux** 2.5mg IV (if not on dialysis)
7. **Morphine sulfate** as needed.
8. Prepare to **transfer urgently** to STEMI Receiving Center for possible rescue PCI.