STEMI Protocol – Thrombolytic Orders

**STEMI Criteria:**
- ST Elevation Myocardial Infarction with onset of symptoms > 15 minutes and < 12 hours
- ST Elevation in at least 2 contiguous leads of > 1 mm in chest or the limb leads or > 2 mm in men / > 1.5 mm in women in leads V2-V3
- New or presumed new LBBB with symptoms suggestive of acute myocardial infarction
- ST depression in > 2 precordial leads (V1-V4) may indicate posterior STEMI

Medical Access Center Saint Alphonsus Health System (MAC):
1-877-367-8855  
Fax# 1-208-367-2738

Activate Life Flight Network:
1-800-232-0911  
*The Medical Access Center will arrange transport if requested*

In the absence of contraindications, fibrinolytic therapy should be administered to patients with STEMI at non-PCI capable hospitals when the anticipated first medical contact to device therapy exceeds 120 minutes

### Referring Emergency Department Patient Information for Transport

<table>
<thead>
<tr>
<th>Arrival / Depart Information</th>
<th>Initial Clinical Data</th>
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</thead>
<tbody>
<tr>
<td>ED Arrival Time:</td>
<td>Time of symptom onset:</td>
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<tr>
<td>First ECG Time:</td>
<td>Initial VS: BP HR RR</td>
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<tr>
<td>Transfer team arrival time:</td>
<td>SAO2</td>
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<tr>
<td>Time patient left the referring facility:</td>
<td>Initial Rhythm</td>
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#### Initiation of STEMI Thrombolytic Order Set

<table>
<thead>
<tr>
<th>Time</th>
<th>RN</th>
<th>Initiation of STEMI Thrombolytic Order Set</th>
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<tbody>
<tr>
<td>1.</td>
<td></td>
<td>12 lead EKG upon arrival and apply cardiac monitor</td>
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<tr>
<td>2.</td>
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<td>If patient meets criteria, call transport service</td>
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<td>3.</td>
<td></td>
<td>Review Inclusion/exclusion criteria for STEMI thrombolytics</td>
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<td>4.</td>
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<td>Contact Medical Access Center to activate STEMI and assist with transport</td>
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<td>5.</td>
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<td>Start (2) Saline IV locks</td>
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<tr>
<td>6.</td>
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<td>Basic Met panel: Trop, CK-MB, PTT, INR, and HCG if child bearing age</td>
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<td>7.</td>
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<td>Chest X-ray – if time allows or if condition warrants</td>
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<tr>
<td>8.</td>
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<td>Aspirin 324 mg PO (give 4 chewable 81 mg tablets)</td>
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<tr>
<td>9.</td>
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<td>Clopidogrel (Plavix®) 300 mg PO * If over the age of 75 give 75 mg PO</td>
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</table>

### Absolute contraindications
- Any prior ICH
- Known structural cerebral vascular lesion (e.g., anteriovenous malformation)
- Known malignant intracranial neoplasm (primary or metastatic)
- Ischemic stroke within 3 months, EXCEPT acute ischemic stroke within 4.5 hours
- Suspected aortic dissection
- Active bleeding or bleeding diathesis (excluding menses)
- Significant closed-head or facial trauma within 3 months
- Intracranial or intraspinal surgery within 2 months
- Severe uncontrolled hypertension (unresponsive to emergency therapy)

**Nurse Signature:**

**Physician Signature:**
11. **Order Thrombolytics: Unless contraindicated**
   - **Retavase (reteplase)** 10 units IV bolus X 2: 2\(^{nd}\) dose to be given 30 minutes after the 1\(^{st}\).
   - **OR**
     - **TNKase (tenecteplase)** (circle dose)
       - <60 kg 30mg IV, 60 – 69 kg 35 mg IV,
       - 70-79 kg 40 mg IV, 80- 89 kg 45 mg IV, >90 kg 50 mg IV
   - **OR**
     - **Activase (alteplase):** (circle dose)
       - < 67 kg Dose: 15 mg IV x1, then 0.75mg/kg (max 50 mg) over 30 minutes, then 0.5 mg/kg (max 35 mg) over 60 minutes
       - >67 kg Dose: 15 mg IV x 1, then 50 mg over 30 minutes, then 35 mg over 60 min

12. **Enoxaparin 30 mg IV bolus**
   - 15 minutes after bolus administer **Enoxaparin 1 mg/kg SQ**, SQ dose max 100 mg
   - *if patient is greater than 75 years old* no bolus and **Enoxaparin 0.75 mg/kg SQ**

13. **Metoprolol (Lopressor\(^{\circledR}\)) 25 mg orally x 1**
    - *Do not give metoprolol if any of the following:*
      - Signs of heart failure or shock
      - Heart rate < 60 or > 110
      - Systolic blood pressure < 120
      - 2\(^{nd}\) or 3\(^{rd}\) degree heart block
      - Asthma
      - Reactive airway disease.

14. **Pain Control:**
    - **Nitroglycerin** 0.4 mg SL or Nitroglycerin Spray
    - **Fentanyl** 25-50 mcg IV as needed for pain

15. **Attach hands free defibrillator pads.**

16. **FAX Face Sheet, ECG, Datasheet and Labs to 208-367-2738 ASAP for Cardiologist**

17. **Door to drug goal.** Patient should have thrombolytic started within 30 minutes of arrival.

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