

|                                     |                       |
|-------------------------------------|-----------------------|
| <b>Thrombolysis checklist STEMI</b> | NHS Number .....      |
|                                     | District Number ..... |
| Age .....                           | Name .....            |
| Weight .....                        | Address .....         |
|                                     | Dob .....             |

### Indications

|    |   |        |
|----|---|--------|
| 1. | History suggestive of acute MI  | Yes/No |
| 2. | Onset of symptoms within last 12 hours  | Yes/No |
| 3. | ECG confirmation of MI (ST elevation > 1mm in contiguous limb leads or chest leads, ST depression V1-V4 with R wave V1-V2 (true posterior infarct)) | Yes/No |
| 4. | Circle Yes if there are no absolute contra-indications (see below)  | Yes/No |
| 5. | Circle Yes if there are no relative contra-indications (see below)  | Yes/No |
| 6. | Counselled on stroke risk (approx. 1%) and consent given  | Yes/No |

### Absolute contra-indications to thrombolysis

|     |  |        |
|-----|--|--------|
| 1   | Previous intracranial haemorrhage or stroke of unknown origin at any time      | Yes/No |
| 3.  | CNS damage   | Yes/No |
| 4.  | Intracranial tumour or AVM   | Yes/No |
| 5.  | Recent major trauma/surgery/head injury within last 2 weeks                    | Yes/No |
| 6.  | Gastrointestinal bleeding in last month  | Yes/No |
| 7.  | Known bleeding disorder (excluding menses)                                     | Yes/No |
| 8.  | Suspected Aortic dissection  | Yes/No |
| 9.  | Non compressible punctures in past 24 hours (eg liver biopsy, lumbar puncture) | Yes/No |
| 10. | Active internal bleeding   | Yes/No |
| 11. | Hypersensitivity to alteplase  | Yes/No |
| 12  | Pregnancy or 1 week post-partum  | Yes/No |

### Relative contra-indications to thrombolysis

|     |   |        |
|-----|---|--------|
| 1   | TIA or ischaemic stroke in last 3 months  | Yes/No |
| 2.  | Warfarin therapy (check INR < 2 ) the higher the INR the greater the risk                         | Yes/No |
| 3   | DOAC-eg edoxaban, rivaroxaban, apixaban, dabigatran-consider when was last dose-see senior advice | Yes/No |
| 5.  | Refractory hypertension systolic > 180mmHg, Diastolic > 110mmHg-control prior to thrombolysis     | Yes/No |
| 6.  | Advanced liver disease  | Yes/No |
| 7.  | Infective endocarditis  | Yes/No |
| 8.  | Active peptic ulcer   | Yes/No |
| 9.  | Prolonged or Traumatic resuscitation (> 10mins)   | Yes/No |
| 10. | GI Bleed last 6 month   | Yes/No |
| 11. | Bleeding Diathesis  | Yes/No |
| 12. | Hypertensive/diabetic retinopathy with Haemorrhage  | Yes/No |
| 13  | Serious systemic disease  | Yes/No |

### Minor contra-indications to thrombolysis

|    |                         |        |
|----|-------------------------|--------|
| 1. | Retinal Neoplasm        | Yes/No |
| 2. | Recent laser treatment  | Yes/No |
| 3. | History of hypertension | Yes/No |

## Actions

If Yes to questions 1-6 start thrombolysis

Where there is an absolute contra-indication do not give thrombolysis

Where there is doubt about the indications/relative contraindications are present the risks and benefits of treatment should be sought from Registrar/Consultant

Signature ..... Print name .....

Designation ..... Date ..... Time .....

### Treatment/Thrombolysis (Prescribe on JAC)

Aspirin 300mg Time .....

Clopidogrel Dose ..... Time .....

IV Heparin infusion Dose: (See chart) Time .....

No Thrombolysis given because Too late(12hrs) ..... Diagnosis uncertain .....  
Non qualifying ECG ..... Other(specify) .....

### Alteplase Dosing information for thrombolysis in STEMI

- a) Accelerated dose regime (90 minutes): For patients with acute myocardial infarction, in whom treatment can be started within 6 hours after symptom onset.

|   | ≥65kg   | <65kg   |
|---|---|---|
| Alteplase<br>(accelerated regimen)<br><br>The maximum total dose of alteplase is 100mg. | <b>Step 1:</b> 15mg IV bolus                    | <b>Step 1:</b> 15mg IV bolus                                    |
|   | <b>Step 2:</b> 50mg IV infusion over 30 minutes | <b>Step 2:</b> 0.75mg/kg (Max 50mg) IV infusion over 30 minutes |
|   | <b>Step 3:</b> 35mg IV infusion over 60 minutes | <b>Step 3:</b> 0.5mg/kg (Max 35mg) IV infusion over 60 minutes  |

- b) For patients presenting 6-12 hours after the onset of symptoms, then use the 3 hour dosing regimen (See BNF for details on dosing).

### Adjunctive therapy for alteplase in STEMI:

Currently the anticoagulant therapy of choice for patients prescribed alteplase for thrombolysis is unfractionated intravenous (IV) heparin. Heparin should be administered immediately before the alteplase, and continued for at least 48 hours, on a body weight adjusted basis. Treatment with IV heparin is recommended until revascularisation (if performed), or for the duration of the hospital stay (Up to 8 days). See dosing information below:

- 60 units/kg IV bolus (Maximum 4000 units), followed by an infusion of 12 units/kg per hour (maximum of 1000 units/hour), adjusted to target aPTT of 1.5-2 times that of control.

For patients already receiving heparin treatment, the initial bolus should not be given.

### Fondaparinux:

Fondaparinux is to be used in the circumstances where thrombolysis is **not** possible i.e. if patient presents > 12 after the initiation of symptoms, and is **not** to be prescribed if thrombolysis treatment has been initiated.