

Medication: Tenecteplase (TNKase)	PDN: 6982.02	Last Updated: June 20, 2013	PMD: Andrew Travers*	PDC: Steven Carrigan*	Page 1 of 2
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TENECTEPLASE (TNKase)

1.0 Classification

- Fibrinolytic

2.0 Mechanism of Action

- Binds to fibrin and converts plasminogen to plasmin

3.0 Indications

- For the treatment of ST segment elevation myocardial infarction (STEMI) of less than twelve (12) hours duration and more than twenty (20) minutes duration

4.0 Contraindications (for pre-hospital administration)

- Active bleeding or known bleeding/clotting disorder
- Patient on blood thinners [warfarin (Coumadin), dabigatran (Pradax), rivarobaxan (Xarelto)]
- Recent (within 6 weeks) major trauma, surgery (including eye surgery), GI/GU bleed
- History of stroke, TIA, severe dementia or structural CNS damage
- Significant closed head/facial trauma with last 3 months
- Significant hypertension (SBP > 180 or DsBP > 110) at any time from presentation
- Right arm versus left arm SBP difference of 15mmHg
- Prolonged (greater than 10 minutes) CPR

5.0 Precautions

- Bleeding risk is increased with combined use of fibrinolytics and anticoagulants
- Monitor any IV insertion sites for bleeding post-administration

6.0 Route

- May be given IV

7.0 Dosage

To Reconstitute TNK:

- Withdraw 10mL sterile water into 10mL syringe
- Inject all 10mL into TNKase gently
- Gently swirl the contents until completely dissolved (DO NOT SHAKE); solution should be colourless or pale yellow and transparent

Patient weight		TNK (mg)	mL of reconstituted TNK to be administered
kg	lbs		
Less than 60	Less than 130	30	6
60 to 69	130 to 154	35	7
70 to 79	155 to 174	40	8
80 to 89	175 to 199	45	9
90 or greater	200 or greater	50	10

To Administer TNK:

- Withdraw the appropriate volume of solution based on the patient's ideal body weight (see chart above)
- Flush the line with normal saline prior to TNK administration
- Administer the appropriate dose of TNK over 5 seconds
- Flush the line with normal saline after administration
- Remaining solution in vial should be taken to the hospital with the patient and given to hospital staff

8.0 Supplied

- 50 mg TNKase (freeze-dried) vial (sterile water as diluent)

9.0 May Be Given By

- ACP/CCP (after consultation with regional facility ED physician)

10.0 Adverse effects

- Major and/or minor external/internal bleeding
- Nausea/vomiting
- Hypotension
- Pulmonary edema
- Cardiac failure
- Embolism
- Arrhythmias (during reperfusion)

11.0 Special notes

- TNKase is to be given concurrently with clopidogrel and enoxaparin
- Standard ischemic chest pain management (ASA, nitroglycerin, morphine) should be continued as well
- Pregnancy category C [if the patient will benefit from a Category C drug, it is generally used]

12.0 References

- Chest Pain Clinical Practice Guideline
- EHS STEMI Reperfusion Worksheet
- Compendium of Pharmaceuticals and Specialties (CPS)

*Electronically Signed

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