TENECTEPLASE

SYNONYMS	TNK
BRAND NAME	METALYSE, TNKASE
DRUG CLASS	Thrombolytic
AVAILABILITY	Metalyse vial contains 40 mg (8000 units) or 50 mg (10 000 units) of tenecteplase. Also contains L-arginine, phosphoric acid and polysorbate-20. Prefilled diluent syringes contain 8 mL and 10 mL of water for injections respectively.[1] TNKase vial contains 50 mg (10 000 units) of tenecteplase.Also contains arginine, phosphoric acid and polysorbate-20. Diluent vial contains 10 mL of water for injections.[2] Available through S19A.
WARNING	Use only where staff are trained in advanced life support and where there is access to resuscitation equipment including a defibrillator.[1,3] The dosing information on the syringe is not suitable for all patients.[4,5] Check your local guidelines.
pH	7.3 after reconstitution[2,3]
PREPARATION	**Metalyse**: remove the cap from the prefilled syringe and screw onto the vial adaptor. Push the spike of the vial adaptor into the vial and slowly inject the diluent. Swirl gently to dissolve.[1] **Do not shake**. **TNKase**: use the syringe supplied to withdrawn 10 mL of water for injection from the diluent vial, and use this to reconstitute the TNKase vial. Swirl the vial gently until completely dissolved. **Do not shake**. Slight foaming will subside in a few minutes.[2,3] The concentration is 5 mg/mL (1000 units/mL). The solution is clear and colourless to pale yellow.[1-3]
STABILITY	Vial: store below 30 °C. Protect from light.[1-3] Metalyse reconstituted solution: stable for 8 hours at 30 °C or for 24 hours at 2 to 8 °C.[1] TNKase reconstituted solution: use immediately or stable for 8 hours at 2 to 8 °C.[2,3]
ADMINISTRATION	
IM injection	Not recommended[1-3]
SUBCUT injection	Not recommended[1-3]
IV injection	For patients with a STEMI, inject over 10 seconds.[1] Flush the line with sodium chloride 0.9% before and after injection to avoid precipitation in the line.[1] When used for thrombolysis in acute ischaemic stroke only, may be injected over 5 seconds.[2,3,5] Check your local guidelines.
IV infusion	Not recommended[1-3]
COMPATIBILITY	
Fluids	Sodium chloride 0.9%[1-3]
Y-site	Not recommended[1-3]
INCOMPATIBILITY	Glucose solutions[1-3]
SPECIAL NOTES	Monitor for signs of bleeding especially at vascular puncture and access sites.[1-3] Anaphylactic reactions have been reported.[1-3] Do not use in patients with known hypersensitivity to gentamicin, as very small amounts may be present due to the manufacturing process of tenecteplase.[1] Tenecteplase units are not comparable to units used for other thrombolytic drugs.[1]

REFERENCES

1. Product information. Available from www.tga.gov.au. Accessed 17/09/2020.
2. TNKase. Product monograph. Mississuaga, Ontario: Hoffman-La Roche Ltd. Approved 17/01/2015. Available from www.propg.com.au. Accessed 04/10/2022.
3. TNKase. US Prescribing information. South San Francisco: Genentech Inc. Approved 11/07/2018. Updated January 2020. Available from www.propg.com.au. Accessed 04/10/2022.
4. Acute coronary syndromes [March 2018]. In: eTG complete [internet]. Melbourne: Therapeutic Guidelines Limited; August 2020.
5. Australian Clinical Guidelines for Stroke Management: acute medical and surgical management. Melbourne: Stroke Foundation; 2019. Available from www.informme.org.au. Accessed 16/09/2020.