Teicoplanin Intravenous for Adults

Who can administer

May be administered by registered competent doctor or nurse/midwife

Important information

- See **monitoring** requirements
- **Reserve antimicrobial**: Restricted for indications in the antimicrobial prescribing guidelines, or following approval by microbiology/infectious diseases
- **Second line to vancomycin** for most indications, except surgical prophylaxis
- See under 'Dose' for adjustments required in **renal** impairment
- **Unlicensed** for surgical antibiotic prophylaxis

Available preparations

Targocid 400mg vial

Targocid 200mg vial

Teicoplanin 400mg vial (Noridem)

Teicoplanin 200mg vial (Noridem)

Reconstitution

Water for injection (provided in box)

- Slowly add entire contents of ampoule (Water for injection) provided to vial of teicoplanin (200mg or 400mg vial)
- **Gently roll the vial** between the hands until the powder is completely dissolved (**avoiding the formation of foam)**
- If the solution does become foamy **allow it to stand for 15 minutes** to allow the foam to subside
- A full dose of 200mg or 400mg will be obtained if 3mL is withdrawn (there is a calculated excess in each vial)

Infusion fluids

Sodium chloride 0.9% or Glucose 5%

Methods of intravenous administration

Can use either method of administration for doses up to 800mg- choice depends on practicalities such as time available, fluid status of patient etc.

Slow intravenous injection (preferred route for surgical prophylaxis for doses up to and including 800mg)[ref 1]

- Give over 3 to 5 minutes

Intermittent intravenous infusion (must be used for all doses greater than 800mg)

- Add required dose to 100mL infusion fluid and administer over 30 minutes
- A 50mL infusion may be used if required (eg fluid restriction) but the residual volume in the infusion line must be flushed through at the same rate to avoid significant underdosing

Dose in adults

Moderate infections

- **Loading dose:** 6mg/kg every twelve hours for three doses
- **Maintenance dose:** 6mg/kg once daily thereafter

Severe infections e.g. joint and bone infection and endocarditis (Micro/ID involved)

- **Loading dose**: 12mg per kg **every twelve hours for 3 to 5 doses**
- **Maintenance dose:** 12mg per kg once daily thereafter

Surgical prophylaxis [ref 1]

- See GUH antimicrobial guidelines (usually 10mg/kg (max 800mg) stat, repeated according to indication)
- For patients requiring specific surgical prophylaxis against MRSA, teicoplanin is recommended in preference to vancomycin as it can be given as a slow intravenous injection

Renal impairment dose adjustments		
eGFR (mL/min/1.73m^2)	**Dose**	**Frequency**
Give usual dose on days 1 to 4, then reduce dose as indicated below		
30 to 80	Usual dose	Every 48 hours
less than 30	Usual dose	Every 72 hours
Renal replacement therapy	Consult pharmacy or specialist literature sources	

Monitoring

- **Levels are not routinely recommended** and should only be considered after consultation with microbiology or ID
- Examples where levels may prove useful include: severe sepsis or burns, deep seated staphlococcal infection, endocarditis, renal impairment, elderly patients, intravenous drug abusers
- Monitor **FBC, LFTs, renal** function during treatment
- Monitor renal function, and perform auditory tests when:
  - high doses are used
  - used in conjunction with other nephrotoxic agents
  - renal impairment is present

Teicoplanin levels (ref 2)		**Recheck levels after**
Skin and soft tissue infection	Pre dose 15 to 30mg/L, but less than 60mg/L	6 to 8 days
Bone and joint infection	Pre dose 20 to 40mg/L, but less than 60mg/L	
Infective endocarditis	Pre dose 30 to 40mg/L, but less than 60mg/L	
OPAT on 25mg/kg 3xper week	Pre dose 20 to 30mg/L	

Further information

- Administer with caution to patients known to be hypersensitive to vancomycin as cross-sensitivity may occur. A history of **Vancomycin infusion reaction** [ref 3] with vancomycin is not a contraindication to teicoplanin

Storage

- Store below 25^{0}C

References

Targocid 400mg SPC September 2022

1: Antimicrobial guidelines (adults) for GUH

2:Bristol Centre for Antimicrobial research and evaluation

3: UpToDate: correct terminology for describing infusion related reactions

Therapeutic classification

Glycopeptide antibiotic