Avibactam/Ceftazidime Intravenous Infusion for Adults

Who can administer

May be administered by competent doctor or nurse/midwife

Important information

- Restricted to Microbiology or Infectious Diseases advice only (Red-light antimicrobial)
- **If documented immediate, or severe delayed hypersensitivity REACTION to PENICILLIN or CEPHALOSPORIN: DO NOT GIVE THIS DRUG**
- See under Dose for adjustments required in Renal impairment
- Dosing is based on the sum of the individual components. Zavicefta 2.5g contains ceftazidime 2g and avibactam 0.5g
- **Contains Sodium** (approx 146mg per vial)- if sodium load is important consider using Glucose 5% as the infusion fluid

Available preparations

Zavicefta 2.5g vial (ceftazidime 2g and avibactam 0.5g)

Reconstitution

Water for injection

- 10ml per 2.5g vial (gives a FINAL concentration of 2.5g in 12ml)
- Shake to give a clear solution. Once the product has dissolved, insert a gas relief needle to relieve the internal pressure
- Immediately transfer required dose to an appropriate volume infusion bag [(see table below)] (time from starting reconstitution to addition into infusion bag preparation must be less than 30 minutes)

Infusion fluids

Sodium chloride 0.9% or Glucose 5%

Methods of intravenous administration

Intermittent intravenous infusion

- Add required dose to infusion fluid (volume below) and administer over 2 hours

Required Dose	Volume of reconstituted solution prior to addition to infusion bag	Volume of infusion bag
2.5g (2g/0.5g)	12ml (entire contents)	100 to 250ml
1.25g (1g/0.25g)	6ml	100ml
937.5mg (750mg/187.5mg)	4.5ml	87ml (remove 13ml from 100ml bag)

Note: 50ml infusion may be used if required for all doses (e.g. 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

Usual dose

- Give 2.5g (2g/0.5g) every eight hours

Renal impairment [ref 1]

- eGFR 31 to 50 ml/minute: give 1.25g (1g/0.25g) every 8 hours
- eGFR 16 to 30 ml/minute: give 937.5mg (750mg/187.5mg) every 12 hours
- eGFR 6 to 15ml/minute: give 937.5mg (750mg/187.5mg) every 24 hours
- End stage renal disease including on haemodialysis: give 937.5mg (750mg/187.5mg) every 48 hours. On haemodialysis days, administer dose following completion of dialysis

Hepatic impairment

- No dosage adjustment required

Further information

- The final concentration of the infusion must be between 8 and 40mg/ml of ceftazidime component, hence the specific volumes recommended above

Storage

- Store below 25^{0}C
- Complete preparation of the intravenous infusion within 30 minutes of starting reconstitution

References

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Therapeutic classification

Cephalosporin antibiotic (third generation) with beta-lacatamase inhibitor