Fosfomycin (disodium) Intravenous for Adults

Who can administer

May be administered by registered competent doctor or nurse/midwife

Important information

- **Restricted antibiotic:** the **INTRAVENOUS route** is reserved for serious infections with limited treatment options, following approval by microbiology/infectious diseases/CF consultant. It is usually used in combination therapy.
- **Note:** the vials are labelled as containing 4g in 100ml - however- they actually contain 4g drug powder, which then needs reconstitution and dilution to 100ml
- See under 'Dose' for adjustments required in **renal** impairment
- **Unlicensed for** use in cystic fibrosis
- A low sodium diet is recommended during treatment with Fosfomycin (56mmol sodium per 4g dose)

Available preparations

Fomicyt 4g vial

Reconstitution

Glucose 5% ONLY (see further information below)

- Reconstitute 4g vial with 20ml diluent removed from a 100ml infusion bag
- The vial will warm slightly upon reconstitution
- Once dissolved, transfer the reconstituted solution to the above infusion bag to produce a 4g in 100ml infusion

Methods of intravenous administration

Intermittent intravenous infusion

- Administer 2g dose over at least 15 minutes
- Administer 4g dose over at least 30 minutes
- Administer 8g dose over at least 60 minutes

Dose in adults

Usual dose (ref 1,3)

Indication	Daily dose
Cystic fibrosis (unlicensed)(ref 2)	4g every six hours
Complicated urinary tract infection	8g every twelve hours
Nosocomial lower respiratory tract infection	8g every eight hours
CPE infection (adults) in combination with other antimicrobials	See page 39 of National Guidelines

Maximum 8g per dose

Elderly patient: Use usual recommended dose. Reduce dose if evidence of renal impairment

Renal impairment FOR CYSTIC FIBROSIS (ref 2)	
Use with GREAT CAUTION in patients with renal impairment. Discuss with Micro/ID/CF consultant before using in any patient with renal impairment.	
eGFR (ml/min/1.73m^2)	**Recommended dose**
30 to 40	8g loading dose, then 4g every eight hours
20 to 30	6g loading dose, then 3g every eight hours
10 to 20	4g loading dose, then 2g every eight hours
less than 10	2g loading dose, then 1g every eight hours
Intermittent haemodialysis	2g loading dose, then 2g at the end of each dialysis session

Renal impairment for indications NOT cystic fibrosis (ref 1,3)		
Use with GREAT CAUTION in patients with renal impairment. Discuss with Micro/ID consultant before using in any patient with renal impairment.		
eGFR (ml/min/1.73m^2)	**UTI**	**Other infections**
30 to 40	8g loading dose, then 6g bd	8g loading dose, then 8g bd
20 to 30	8g loading dose, then 4g bd	8g loading dose, then 6g bd
10 to 20	6g loading dose, then 3g bd	8g loading dose, then 4g bd
less than 10	6g loading dose, then 3g **od**	8g loading dose, then 4g **od**
Intermittent haemodialysis	2g loading dose, and then 2g at the end of each dialysis session	
Continuous renal replacement therapy (RRT)	Post-dilution CVVHF - give usual dose. Pre-dilution CVVHF or other forms of RRT: no clinical data	

Hepatic impairment: No dosage adjustment necessary

Monitoring

- Monitor electrolytes (sodium and potassium) due to sodium content (each 4g dose contains 56mmol sodium)
- Monitor fluid balance

Further information

- Water for Injection can be used as a diluent - however, it may not beÂ practical to administer the drug in 100ml Water for Injection

Storage

Store below 25^{0}C

References

1:Fomicyt SPC Oct 2021

2: Nottingham University Hospitals: Adult Cystic Fibrosis Intravenous Antibiotic Dosing and Administration Guideline May 2020, together with email correspondence 4th Nov 2021

3: Dosage schedules simplified, as agreed with Dr Una Ni Riain, Microbiologist 26/3/2015

Therapeutic classification

Antibiotic