

CEFIDEROCOL

| Trade Name | Fetroja® | | | | | | | | | | | | | | | | |
|--|--|---------------|------------------------------------|---------|---------------|--------|-------|---------|------------------------------------|------|-----------------------|--------------|---------------------|----------------------|--------|---------------|-----------------|
| Class | Extended Spectrum Cephalosporin Antibiotic | | | | | | | | | | | | | | | | |
| Mechanism of Action | Inhibits bacterial wall synthesis | | | | | | | | | | | | | | | | |
| Indications Individual ID approval required for full treatment course | Resistant gram-negative infections To be used only on advice of Infectious Disease Consultant | | | | | | | | | | | | | | | | |
| Contraindications | Known hypersensitivity to cephalosporins | | | | | | | | | | | | | | | | |
| Supplied As | Injection: 1 gram of white lyophilised powder in a clear glass vial | | | | | | | | | | | | | | | | |
| Dilution Caution 2 step dilution process | <p>Step 1. Add 10 mL sodium chloride 0.9% to the vial, and shake gently to dissolve, then wait for the bubbles to disperse</p> <table border="1"> <thead> <tr> <th>Drug</th> <th>Sodium Chloride 0.9%</th> <th>Volume*</th> <th>Concentration</th> </tr> </thead> <tbody> <tr> <td>1 gram</td> <td>10 mL</td> <td>11.2 mL</td> <td>89 mg/mL (approximately)</td> </tr> </tbody> </table> <p>*Note: Displacement value of the powder is 1.2 mL</p> <p>Step 2. Take 1 mL (89 mg) of the solution in step 1 and add 7.9 mL of sodium chloride 0.9% to give a final concentration of 10 mg/mL</p> <table border="1"> <thead> <tr> <th>Drug</th> <th>Sodium Chloride Added</th> <th>Final Volume</th> <th>Final Concentration</th> </tr> </thead> <tbody> <tr> <td>1 mL (= 89mg)</td> <td>7.9 mL</td> <td>8.9 mL</td> <td>10 mg/mL</td> </tr> </tbody> </table> | Drug | Sodium Chloride 0.9% | Volume* | Concentration | 1 gram | 10 mL | 11.2 mL | 89 mg/mL (approximately) | Drug | Sodium Chloride Added | Final Volume | Final Concentration | 1 mL (= 89mg) | 7.9 mL | 8.9 mL | 10 mg/mL |
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| 1 gram | 10 mL | 11.2 mL | 89 mg/mL (approximately) | | | | | | | | | | | | | | |
| Drug | Sodium Chloride Added | Final Volume | Final Concentration | | | | | | | | | | | | | | |
| 1 mL (= 89mg) | 7.9 mL | 8.9 mL | 10 mg/mL | | | | | | | | | | | | | | |
| Dosage | Loading dose: 60 mg/kg Maintenance Dose: 30 - 40 mg/kg/dose (see refs 3,4,5) | | | | | | | | | | | | | | | | |
| Interval | Eight hourly dosing | | | | | | | | | | | | | | | | |
| Administration | Intravenous infusion over 3 hours | | | | | | | | | | | | | | | | |
| Compatible With | Solution: sodium chloride 0.9%, glucose 5% Y-site: No information available | | | | | | | | | | | | | | | | |

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| Incompatible With | No information available There is no information on compatibility with TPN or SMOF lipid, please use a separate line if at all possible. |
| Interactions | May cause false positive results when performing dipstick tests for urine protein, ketones occult blood etc |
| Monitoring | Biochem, renal function, liver function tests Watch for diarrhoea and skin reactions |
| Stability | Use immediately after reconstitution of the vial and discard the remainder. |
| Storage | Unopened vials should be stored in the fridge at between 2 – 8° Celsius. Manufacturers Expiry. |
| Adverse Reactions | GI upset: diarrhoea, constipation, nausea vomiting Skin reactions: rash, infusion site reactions, Candidiasis, cough, increased liver function test results, headache, hypokalaemia, |
| Metabolism | Renally cleared, elimination half life (adults) = 2-3 hours |
| Comments | Section 29 medicine – not currently registered for use in NZ |
| References | <ol style="list-style-type: none"> 1. Product Data Sheet Manufacturer = Shionogi & Co Ltd 2. Injectable Drug Handbook from Children’s Hospital at Westmead, Sydney, Australia 3. Koirala A et al Successful use of Cefiderocol to treat a Multi-drug resistant Stenotrophomonas maltophilia, ventilator associated pneumonia in an extremely preterm neonate. The Paediatric Infectious Disease Journal 2023. https://www.semanticscholar.org/paper/Successful-Use-of-Cefiderocol-to-Treat-a-Pneumonia-Koirala-Krishnappa/583c52c0ed2a4fb95c83623664fbc986dbcab0d3 4. Dosing advice re previous treatment of a neonate in Sydney- email conversation with Bradley Rockliff, Senior Pharmacist, Infectious Diseases and Antimicrobial Stewardship, Children’s Hospital at Westmead Sydney 28 March 2024 5. Monari C et al. Bloodstream Infection Due to a VIM Metallo B- lactamase Producing Klebsiella pneumoniae, Treated with Cefiderocol in a Preterm Newborn. Infectious Diseases 2023 (12) 727-734. https://link.springer.com/article/10.1007/s40121-022-0073 |
| Updated By | B Robertshawe, N Austin March 2024 |