

cefOTAXIME

Newborn use only

2020

Alert	High risk medicine. The Antimicrobial Stewardship Team recommends this drug is listed under the following category: Restricted.																							
Indication	As part of therapy for suspected meningitis. Treatment of proven meningitis and sepsis caused by susceptible organisms (e.g., <i>E.coli</i> , <i>H. influenzae</i> , <i>Klebsiella</i> spp.).																							
Action	Bactericidal agent which inhibits cell wall synthesis in susceptible bacteria. Broad spectrum against gram positive and many gram negative organisms but not <i>Pseudomonas</i> species.																							
Drug type	Cephalosporin antibiotic.																							
Trade name	Cefotaxime Sandoz, DBL Cefotaxime Sodium																							
Presentation	500 mg and 1 g vial																							
Dose	<p>50 mg/kg/dose.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Corrected Gestational Age/Postmenstrual Age</th> <th style="text-align: center;">Postnatal Age</th> <th style="text-align: center;">Interval</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">< 30⁺⁰ weeks</td> <td style="text-align: center;">0–28 days</td> <td style="text-align: center;">12 hourly</td> </tr> <tr> <td style="text-align: center;">< 30⁺⁰ weeks</td> <td style="text-align: center;">≥29 days</td> <td style="text-align: center;">8 hourly</td> </tr> <tr> <td style="text-align: center;">30⁺⁰–36⁺⁶ weeks</td> <td style="text-align: center;">0–14 days</td> <td style="text-align: center;">12 hourly</td> </tr> <tr> <td style="text-align: center;">30⁺⁰–36⁺⁶ weeks</td> <td style="text-align: center;">≥15 days</td> <td style="text-align: center;">8 hourly</td> </tr> <tr> <td style="text-align: center;">≥ 37⁺⁰ weeks</td> <td style="text-align: center;">0–7 days</td> <td style="text-align: center;">8 hourly</td> </tr> <tr> <td style="text-align: center;">≥ 37⁺⁰ weeks</td> <td style="text-align: center;">≥8 days</td> <td style="text-align: center;">6 hourly</td> </tr> </tbody> </table>			Corrected Gestational Age/Postmenstrual Age	Postnatal Age	Interval	< 30 ⁺⁰ weeks	0–28 days	12 hourly	< 30 ⁺⁰ weeks	≥29 days	8 hourly	30 ⁺⁰ –36 ⁺⁶ weeks	0–14 days	12 hourly	30 ⁺⁰ –36 ⁺⁶ weeks	≥15 days	8 hourly	≥ 37 ⁺⁰ weeks	0–7 days	8 hourly	≥ 37 ⁺⁰ weeks	≥8 days	6 hourly
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Dose adjustment																								
Maximum dose																								
Total cumulative dose																								
Route	IV IM																							
Preparation	<p>IV Add 9.8 mL of water for injection to the 500 mg powder to make a 50 mg/mL solution OR Add 9.6 mL of water for injection to the 1 g powder to make a 100 mg/mL solution.</p> <p>IM injection Add 2 mL of water for injection to the 500 mg powder to make a 230 mg/mL solution OR Add 3 mL of water for injection to the 1 g powder to make a 300 mg/mL solution.</p>																							
Administration	<p>IV bolus: over 3–5 minutes. IV infusion: over 15–30 minutes IM injection: Inject deep into the large muscle.</p>																							
Monitoring	Cefotaxime has a high therapeutic index. Consider monitoring renal function, blood count and electrolytes if therapy is prolonged.																							
Contraindications	Hypersensitivity to cefotaxime or other cephalosporins or previous history of major allergic response to a penicillin.																							
Precautions	Liver and renal disease. Sodium restriction – cefotaxime contains 48.2 mg/g (2.1 mmol/g) sodium.																							
Drug interactions	May potentiate the renal toxicity of nephrotoxic drugs. Should not be combined with bacteriostatic antibiotics (e.g., tetracycline, erythromycin or chloramphenicol) since there may be a potential antagonistic effect.																							
Adverse reactions	Leucopaenia, granulocytopaenia, agranulocytosis. Moderate and transient rise in liver enzymes and/or bilirubin. Hypersensitivity reactions. Arrhythmias have occurred in patients who received rapid IV administration through a central venous catheter. Fungal sepsis. Bacterial resistance.																							
Compatibility	Fluids: Glucose 5%, glucose 10%, Hartmann's, sodium chloride 0.9%																							

	Y site: Amino acid solutions, aciclovir, amifostine, aztreonam, bivalirudin, dexmedetomidine, granisetron, hydromorphone, magnesium sulfate, midazolam, morphine sulfate, pethidine, remifentanyl, tigecycline.
Incompatibility	Fluids: Alkaline solutions e.g., containing sodium bicarbonate. Y site: Aminoglycosides – amikacin, gentamicin, tobramycin; azathioprine, azithromycin, caspofungin, chloramphenicol, chlorpromazine, dobutamine, dolasetron, filgrastim, fluconazole, ganciclovir, haloperidol lactate, hydralazine, labetalol, methylprednisolone sodium succinate, mycophenolate mofetil, pentamidine, phenobarbitone, phentolamine, promethazine, protamine, sodium bicarbonate, vecuronium.
Stability	Reconstituted solution is stable for 24 hours at 2 to 8 °C. Protect from light. Do not use if powder or solutions have darkened in colour.
Storage	Store below 25°C Protect from light.
Excipients	
Special comments	The main metabolite of cefotaxime is desacetylcefotaxime. This metabolite is active and is thought to enhance activity against Gram negative organisms. It has a longer half-life than cefotaxime. The major route of clearance of both cefotaxime and desacetylcefotaxime is renal.
Evidence	Refer to full version.
Practice points	
References	Refer to full version.

VERSION/NUMBER	DATE
Original 1.1	08/08/2015
Version 2.1	10/08/2017
Version 3.0	16/12/2020
Review	16/12/2025

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