

St Vincent's Hospital / SydPath
Drug Measurement Information Sheet



<u>CEFOTAXIME</u>	<ul style="list-style-type: none">- third generation cephalosporin. Time-dependent killing.- <u>active against</u>: many Gram-negative organisms including <i>Enterobacteriaceae</i>; active against most streptococci (but not Enterococci) and some anti-staphylococcal activity. Notably, it has <u>no activity</u> against <i>Pseudomonas aeruginosa</i> or MRSA.	
WHEN TO CONSIDER TDM	Consider in critically ill patients, especially those with sepsis, trauma, burns, impaired renal function or undergoing dialysis. In addition, TDM should be undertaken in any patient undergoing >2 weeks therapy to ensure the dose is optimal.	
PHARMACOKINETICS (may be altered in critical illness and organ dysfunction)	Absorption	N/A – IV only
	Protein binding	27-38%
	Clearance	As metabolites: 50% (25% active) Unchanged in urine: 50%
	Elimination t½	1.1 hours
SAMPLE COLLECTION TIME	Trough sample 24 hours after initiation or dose change.	
REQUESTING & COLLECTION	Collect 4 mL in a purple top (EDTA) tube (no gel separator). <u>Important information required on request form:</u> <ul style="list-style-type: none">1) Time and date of last dose2) Time since last dose change/commencement3) Time of blood sample collection4) Dosing regimen (dose and frequency)	
HANDLING & TRANSPORT	Sample must be delivered to laboratory within 1 hour of collection. If not delivered to the lab within 2 hours of collection, centrifuge, separate plasma and freeze within 3 hours of collection.	
AVAILABILITY	Test generally performed 5 days a week. Specific days and timing should be confirmed with SydPath.	
REFERENCE INTERVALS	Suggested Therapeutic Targets Empiric therapy: Trough 2-16 mg/L <i>Note: Based on EUCAST breakpoints</i> Directed therapy: trough >4 x MIC Toxic Range: None defined	
CONTACT	Patient Results: (02) 8382 9100 Further information: www.syddpath.com.au - Test Database	
INSTRUCTIONS FOR REFERRING LABORATORIES Centrifuge, separate plasma within 3 hours of collection, store and transport plasma frozen.		
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References:

1. The Sanford Guide to Antimicrobial Therapy 2016 (46th Edition)
2. Australian Medicines Handbook online. Accessed 07/06/2017.
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3. Patel KB, Nicolau DP, Nightingale CH, et al: Pharmacokinetics of cefotaxime in healthy volunteers and patients. Diagn Microbiol Infect Dis 1995; 22:49-55.
4. Carmine AA, Brogden RN, Heel RC, et al: Cefotaxime. A review of its antibacterial activity, pharmacological properties and therapeutic use. Drugs 1983; 25:223-289.
5. The European Committee on Antimicrobial Susceptibility Testing.
http://www.eucast.org/fileadmin/src/media/PDFs/EUCAST_files/Breakpoint_tables/v_8.0_Breakpoint_Tables.pdf