Meropenem

Newborn	use onl	V
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Alert	The Antimicrobial Stewardship Team recommends this drug is listed under the following categor					
	Restricted.					
	Widespread use of carbapenems has been linked with increasing prevalence of infections caused by					
	methicillin-resistant Staphylococcus aureus (MRSA), vancomycin-resistant enterococci (VRE), multi-					
Indication	resistant Gram-negative organisms and Clostrialum difficile.					
indication	severe intections (e.g., sepsis or meningitis) caused by Gram-negative organisms resistant to other					
	(ESBL)-producing organisms					
	(ESDL)-producting organisms. Note: Meronenem is NOT active against many resistant Gram-nositive organisms, such as MPSA and					
	most Staphylococcus epidermidis. Vancomycin is first-line therapy for these. Meronenem does have					
	activ	vity against penicillin-suscepti	ble Gram-positive	organisms and mo	st anaerobic organisms	s. For
	indi	vidual advice, discuss therapy	with a microbiolog	gist or infectious d	iseases physician.	
Action	Meropenem is a carbapenem. It inhibits cell wall synthesis. (1)					
	Mer	openem is a better choice that	an imipenem for ce	ntral nervous syst	em infections. Merope	nem
	atta	ins a higher concentration in t	the cerebrospinal f	luid particularly w	ith inflamed meninges	and has a
Durations	lowe	er incidence of seizures than i	mipenem.			
Drug type	Cart				1	
Trade name	Ivier	openem APOTEX, Meropener	n DBL, Meropenen	n GH, Meropenem	Juno, Meropenem Kar),
Procontation	500	mg vial				
Fresentation	100	Ting vial Timg vial				
Dose	Non	-CNS and Non-Pseudomonas	Sensis			
2000		Gestational Age at birth	Postnatal Age	Dose	Interval]
		$< 32^{+0}$ weeks	0–13 davs	20 mg/kg	12 hourly	
		< 32 ⁺⁰ weeks	14+ davs	20 mg/kg	8 hourly	-
		\geq 32 ⁺⁰ weeks	0–13 days	20 mg/kg	8 hourly	
		\geq 32 ⁺⁰ weeks	14+ days	30 mg/kg	8 hourly	
	Mer	ningitis and Pseudomonas Se	psis			-
	Mer	ningitis and Pseudomonas Se Gestational Age at birth	psis Postnatal Age	Dose	Interval	
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Dose adjustment Maximum dose Total cumulative dose Route Preparation	Mer Asse kidn IV ir IV ir Add Add	ningitis and Pseudomonas Sej Gestational Age at birth Any ess for renal impairment prior eys. flusion. nts ≤1kg 9.6 mL of water for injection 19.1 mL of water for injectior	psis Postnatal Age Any to using higher do to 500 mg vial to make	Dose 40 mg/kg ses as meropenen nake a 50 mg/mL solur	Interval 8 hourly n is primarily excreted v solution OR tion.	via
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Dose adjustment Maximum dose Total cumulative dose Route Preparation Administration	Mer Asse kidn IV ir IN ir Infa Add Add FUR Drav mak Infa Add FUR Drav mak IV ir May Ren	Aingitis and Pseudomonas Segues Gestational Age at birth Any ess for renal impairment prior eys. ifusion. nts ≤1kg 9.6 mL of water for injection 19.1 mL of water for injection 19.1 mL of water for injection wup 2 mL (100 mg of merope e a final volume of 10 mL with nts >1kg or fluid restricted 9.6 mL of water for injection THER DILUTE w up 2 mL (200 mg of merope e a final volume of 10 mL with ifusion over 4 hours. (5) v be given over 15 to 30 minut al function.	psis Postnatal Age Any to using higher do to 500 mg vial to m n to 1g vial to make nem) of the above h a final concentrate to 500 mg vial to m nem) of the above h a concentration concentratic concentratic concentration concentrati	Dose 40 mg/kg ses as meropenen hake a 50 mg/mL se a 50 mg/mL solur solution and add cion of 10 mg/mL. hake a 50 mg/mL se solution and add of 20 mg/mL.	Interval 8 hourly n is primarily excreted w solution OR tion. 8 mL sodium chloride C solution. 6 mL sodium chloride C).9% to
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Meropenem Newborn use only

Contraindications	Hypersensitivity to penicillins, cephalosporins and carbapenems.
Precautions	Colitis-due to risk of pseudomembranous colitis.
	Renal impairment.
Drug interactions	Sodium valproate- meropenem may result in clinically significant reduction in concentration of sodium
	valproate, which may cause seizures.
Adverse reactions	Phlebitis, diarrhoea (up to 6% in children), anaemia and eosinophilia.
Compatibility	Fluids: sodium chloride 0.9% (preferred for stability), glucose 5%, glucose 10%,
	Y-site: Amino acid solutions, anidulafungin, caspofungin, linezolid, atropine, dexamethasone sodium,
	gentamicin, heparin sodium, metronidazole.
Incompatibility	Fluids: Mannitol 10%
	Y-site: Dolasetron, ketamine, zidovudine.
Stability	Use immediately after preparation.
	Diluted solutions are potentially unstable, particularly glucose containing solutions and should be
	discarded if not used immediately.
Storage	Vial: Store at room temperature.
Excipients	Sodium carbonate
Special comments	Meropenem 1 g vial contains 3.92 mmol of sodium.
Evidence	Refer to full version.
Practice points	Refer to full version.
References	Refer to full version.

VERSION/NUMBER	DATE
Original 1	05/12/2015
Version 1.2	14/10/2017
Current 2.0	11/12/2020
REVIEW	11/12/2025

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