

OVERVIEW OF THE CHANGES TO: PAEDIATRIC ANTIBIOTIC GUIDELINE FOR SEVERE SEPSIS AND SEPTIC SHOCK AND UNWELL NEONATES

June 2018

Section	Current wording	Changed to	Rationale
Page 14 INDICATION: PAEDIATRIC SEVERE SEPSIS SECONDARY TO URINARY TRACT SOURCE	NON-IMMEDIATE PENICILLIN HYPERSENSITIVITY	NON-IMMEDIATE PENICILLIN HYPERSENSITIVITY and IMMEDIATE PENICILLIN HYPERSENSITIVITY (or severe prior reaction)	Enterococcus is an uncommon cause of UTI and even rarer cause of urosepsis and sepsis in infants and children.
	gentamicin [Note 2] 7.5 mg/kg ideal body weight 1 month to 12 years of age: maximum dose 320 mg, daily 12 to 16 years of age: maximum dose 560 mg, daily	gentamicin [Note 2] 7.5 mg/kg ideal body weight 1 month to 12 years of age: maximum dose 320 mg, daily 12 to 16 years of age: maximum dose 560 mg, daily	Therapeutic Guidelines recommend gentamicin alone for penicillin allergic patients. To prevent giving vancomycin unnecessarily a footnote was included to give additional vancomycin if GBS or enterococcal sepsis is suspected.
	PLUS vancomycin 15mg/kg actual body weight up to 750 mg, 6-hourly	<i>If Group B streptococcus or enterococcal sepsis is known or suspected ADD</i> vancomycin 15mg/kg actual body weight up to 750 mg, 6-hourly	Leazer R 2016 A Meta-analysis of the Rates of Listeria monocytogenes and Enterococcus in Febrile Infants. Hosp Pediatr. 2016 Apr;6(4):187-95. Evidence summary – Journal article

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Page 18 INDICATION: PAEDIATRIC SEVERE SEPSIS SECONDARY TO MENINGITIS/ ENCEPHALITIS No penicillin and non-immediate penicillin hypersensitivity INTRAMUSCULAR	NO PENICILLIN ALLERGY	NO PENICILLIN ALLERGY	Teicoplanin removed as it does not penetrate the CSF.
	dexamethasone [Note 1] 0.15 mg/kg up to 10 mg, with first antibiotic then 6-hourly for 4 days	dexamethasone [Note 1] 0.15 mg/kg up to 10 mg, with first antibiotic then 6-hourly for 4 days	
	PLUS	PLUS	Note added to add vancomycin once IV/IO access is obtained.
	ceftriaxone 50 mg/kg up to 2 g, 12-hourly	ceftriaxone 50 mg/kg up to 2 g, 12-hourly [Note 2]	
	PLUS teicoplanin 10 mg/kg up to 400 mg, 12-hourly for 3 doses then 10 mg/kg up to 400 mg, daily	Note 2: Once Intravenous or intraosseous access has been obtained give vancomycin 15mg/kg (actual body weight) up to 750 mg, 6-hourly	
Page 18 INDICATION: PAEDIATRIC SEVERE SEPSIS SECONDARY TO MENINGITIS/ ENCEPHALITIS Immediate penicillin hypersensitivity (or severe prior reaction) INTRAMUSCULAR	IMMEDIATE PENICILLIN HYPERSENSITIVITY (or severe prior reaction)	IMMEDIATE PENICILLIN HYPERSENSITIVITY (or severe prior reaction)	Teicoplanin removed as it does not penetrate the CSF.
	dexamethasone [Note 1] 0.15 mg/kg up to 10 mg, with first antibiotic then 6-hourly for 4 days	dexamethasone [Note 1] 0.15 mg/kg up to 10 mg [Note 2]	Regimen simplified, oral medications in IM section removed.
	PLUS	AND seek expert advice	Note added to add vancomycin once IV/IO access is obtained.
	teicoplanin 10 mg/kg up to 400 mg, 12-hourly for 3 doses then 10 mg/kg up to 400 mg, daily		
	AND seek expert advice		Evidence summary – Expert opinion
OR dexamethasone [Note 1] 0.15 mg/kg up to 10 mg, with first			

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	antibiotic		
	PLUS		
	ORAL ciprofloxacin 20 mg/kg up to 750 mg, 12-hourly [Note 2]		
	PLUS		
	teicoplanin 10 mg/kg up to 400 mg, 12-hourly for 3 doses then 10 mg/kg up to 400 mg, daily		
	AND seek expert advice		
Page 32 INDICATION: TERM NEONATE – INTRA-ABDOMINAL SOURCE seek expert advice for preterms	INTRAVENOUS (IV)	INTRAVENOUS (IV)	Align with changes to Neomed guidelines
	ampicillin 50 mg/kg (maximum single dose, 250 mg) 0-7 days old, 8-hourly 7-28 days old, 6-hourly	ampicillin 50 mg/kg (maximum single dose, 250 mg) 0-7 days old, 8-hourly 8-28 days old, 6-hourly	Evidence summary – Journal article and Expert opinion
	PLUS	PLUS	
	gentamicin 5 mg/kg, daily (maximum single dose, 25 mg) [Note 1]	gentamicin 5 mg/kg, daily (maximum single dose, 25 mg) [Note 1]	
	PLUS	PLUS	
	metronidazole 15 mg/kg as a loading dose then subsequent doses of: 7.5 mg/kg < 7 days old, 12-hourly 15 mg/kg 7-28 days old, 12-hourly	metronidazole 15 mg/kg as a loading dose then subsequent doses of: 7.5 mg/kg 0-7 days old, 8-hourly 7.5 mg/kg 8-28 days old, 6-hourly	
Throughout document	< 7 days old 7-28 days old	0–7 days old 8–28 days old	Align with changes to Neomed guidelines
	Note 1: Refer to Neonatal Medicines Formulary Consensus Group.	Note 1: Refer to Neonatal Medicines Formulary Consensus Group.	New Neomed webpage

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	https://1drv.ms/f/s!AoK9wZkUP4PgkCj_5YVv-YoXeS9 for ongoing monitoring	http://www.seslhd.health.nsw.gov.au/rhw/Neborn_Care/guidelines_med.asp for ongoing monitoring	
Administration table Flucloxacillin (page 36)	Reconstitution fluid/volume IM: 500 mg: add 1.6 ml water for injection or lignocaine 0.5% or 1% to make a final concentration 250mg/1ml 1 g: add 3.3 ml water for injection or lignocaine 0.5% or 1% to 1 g to make a final concentration 250mg/1ml	Reconstitution fluid/volume IM: 500 mg: add 1.6 mL water for injection or lignocaine 0.5% or 1% to make a final concentration 250mg/1mL 1 g: add 3.3 mL water for injection or lignocaine 0.5% or 1% to 1 g to make a final concentration 250mg/1mL	Lower case l in mL amended
Footer and title amended to reflect date of revision			