

**INTRAVENOUS ANTIBIOTICS/ANTIFUNGALS**

Drug	Dose	Maximum dose/other	Levels/Notes
Amphotericin (Liposomal AmBisome®)	Day 1: 1mg/kg od Day 2: 2mg/kg od Day 3 onwards: 3mg/kg od	Test dose required of 100 micrograms/kg (max 1mg) over 10-15 minutes, one hour before starting treatment.	Monitor renal function, potassium, magnesium and phosphate levels. Caution if used with other nephrotoxic drugs.
Amikacin (once daily regimen usually used)	30mg/kg once daily as infusion	Maximum daily dose: 2000 mg	Levels required. Trough <1mg/L taken before 2 <sup>nd</sup> dose.
	Child and adult: 10mg/kg tds Max initial dose: 500mg tds	Max initial dose: 500mg tds  Dose may be increased after evaluating levels.	Take levels pre-dose and 1 hour post at the 4 <sup>th</sup> dose and after each week. Trough: <10mg/L Peak: 25-30mg/L
Aztreonam	80mg/kg tds Max dose: 2.5g tds	Adult dose: 2.5g tds	
Caspofungin	Adults Day 1: 70mg od Day 2+: 50mg od (standard dose in adults)	If > 80kg, increase daily dose to 70mg od. Reduce dose in hepatic impairment.	Restricted use only on microbiology advice. Currently not licensed under 18 years.
Cefoxitin	Child: 200mg/kg per day, divided every 6-8 hours Adult: 3g qds		Unlicensed, imported drug (Mefoxitin®). Restricted use, only on microbiology advice for rapid growing atypical mycobacteria.
Ceftazidime	100mg/kg bd	Maximum dose: 6g bd	Use bd for convenience but tds if nausea and vomiting occur. Pregnancy dose: 2g tds
Ciprofloxacin	Under 5 years: 4-8mg/kg bd 5-17 years: 10mg/kg tds Adult: 400mg bd	Maximum dose 400mg tds	IV preparation only needed when oral preparation not tolerated.
Clindamycin	10-13mg/kg tds Max: 900mg tds		NB, rarely pseudo-membranous colitis. Advise to stop drug and seek medical advice if any diarrhoea.
Colistimethate sodium (colistin, Colomycin®)	Child: 25,000 units/kg tds. Max: 2 megaunits tds Over 40 kg: 2 megaunits tds	Adult dose: < 40 kg: 1 megaunit tds > 40 kg: 2 megaunits tds Max: 2 megaunits tds	Caution when using with other nephrotoxic drugs.
Imipenem	22mg/kg tds/qds Max: 90 mg/kg/day, 1g qds	Max. 1g qds	
Meropenem	40mg/kg/tds Adult: 2g td	Max. 2g tds	Bolus or infusion
Piperacillin/tazobactam (Tazocin®)	Under 12 years: 90mg/kg tds/qds Over 12 years: 2.25-4.5g tds/qds Max : 4.5g qds	Adult: 4.5g tds-qds	In acute severe infection the dose may be given four times a day. For home treatment three times a day dosing is appropriate.
Teicoplanin	Children: 10 -15mg/kg with initial max dose of 400mg  Adult: 400mg	12 hourly for first 3 doses then once daily.	Drug levels can be used to optimise treatment. For MRSA, trough before 4 <sup>th</sup> or 5 <sup>th</sup> dose, needs to be >20mg/L. Doses may be increased above 400mg if levels suggest it is necessary.

Tigecycline	Children and adults over 12 years: Loading dose of 100mg followed by 50mg every 12 hours		Unlicensed in children. May cause nausea-antiemetics may be co-prescribed if necessary. Not to be used in children under 8 years of age due to the risk of teeth staining.
Tobramycin (once daily regimen usually used)	10mg/kg od over 30-60 minutes.  Maximum dose: 700mg daily	Once daily regimen	Preferably take level immediately before 2 <sup>nd</sup> and 8 <sup>th</sup> dose (i.e. 24hours after the 1 <sup>st</sup> and 7 <sup>th</sup> dose) and after each week thereafter. Ideal level: <1 mg/L  Or:  Take level 14 hours after the 2 <sup>nd</sup> dose and after each week. Ideal level: <2mg/L
	4mg/kg tds as a bolus	Use dose that achieved therapeutic levels on last admission.	Peak taken at 1 hour, 8-12mg/L Trough <2 mg/L
Vancomycin	Child: 15mg/kg tds  Adult: 1g bd/qds (according to renal function)		Monitor levels: take trough before the 4 <sup>th</sup> dose. Ideal levels: Pre: 5-15mg/L For MRSA see appendix 15