BROAD SPECTRUM ANTIBIOTICS ID GUIDELINES

AUCKLAND DISTRICT HEALTH BOARD
Te Toka Tumai

1st line	**piperacillin-tazobactam (Tazocin®)**	
usual dose	**4.5g IV q8h**	**$17.52/day**
for pseudomonas/ neutropenic sepsis	4.5g IV q6h	$23.36/day
for renal impairment (<20mL.min)	reduce to q12h	$11.68/day

2nd line	**meropenem**	
usual dose	**500mg IV q6h**	**$42.00/day**
for UTI	500mg IV q8h	$31.50/day
for renal impairment		
(25 – 49mL.min)	reduce to q8h	
(10-24mL.min)	reduce to q12h	
for CNS infection	2g IV q8h	$126.00/day
for pseudomonas/ neutropenic sepsis	1g IV q6h	$84.00/day

OPIVA 2 inpatient doses only		**ertapenem**
usual dose	**1g IV q24h**	**$70.00/day**
for renal impairment (<10mL.min)	500mg IV q24h	$70.00/day

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broad spectrum antibiotic therapy including antipseudomonal penicillin-beta lactamase inhibitor combinations and carbapenem classes of antimicrobials

FULL DOSING INFORMATION

1st line

piperacillin-tazobactam (Tazocin®)	4.5g IV q8h $17.52/day
for pseudomonas/neut. sepsis	4.5g IV q6h $23.36/day
for renal impairment (<20ml.min)	reduce to q12h $11.68/day
for filtration in intensive care	4.5g IV q6h $23.36/day

2nd line

meropenem	500mg IV q6h $42.00/day
for UTI	500mg IV q8h $31.50/day
for renal impairment (25-49ml.min)	reduce to q8h -
(10-24mL.min)	reduce to q12h -
for pseudomonas/neut. sepsis	1g IV q6h $84.00/day
for CNS infection	2g IV q8h $126.00/day
for filtration in intensive care	1g IV q12h $42.00/day
for HD/CAPD	500mg IV q24h $10.50/day

Only based on sensitivities (rarely necessary)

ticarcillin-clavulanic acid	3.1g IV q6h $72.64/day
for renal impairment (<30ml.min)	reduce to q8h $54.48/day
imipenem-cilastatin	500/500mg IV q6h $73.48/day
for renal impairment (20-30ml.min)	reduce to q8h $55.11/day
for renal impairment (<20ml.min)	reduce to q12h $36.74/day

OPIVA only: max 2 doses pre discharge

ertapenem	1g IV q24h $70.00/day
for renal impairment (<10ml.min)	500mg IV q24h $70.00/day

PRESCRIBING GUIDANCE ON CARBAPENEMS

Dosage

For the majority of infections; meropenem and imipenem doses are interchangeable. Increased doses are required for when host defences are diminished, for particular organisms or when an infection is in a particular site, for example increased doses are required for neutropenic sepsis, for Pseudomonas infection and infections involving the CNS.

Continuous infusion

Continuous infusion is not recommended due to limited stability. However, 3 hour mini-infusions may be useful for PK/PD benefits when treating MROs with elevated MICs.

OPIVA

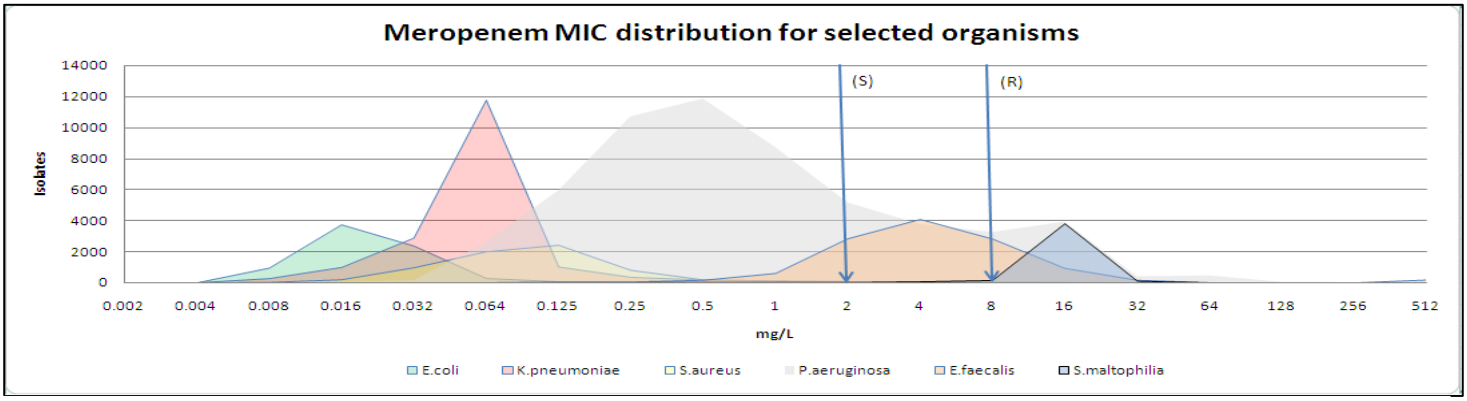
If intermittent administration is not possible, ertapenem guided by susceptibility may be appropriate for OPIVA in which case 2 doses can be administered in hospital for stabilization.

Indication

Empiric therapy of infection due to MRO: note that in most cases ESCAPM† can reliably be treated with another choice of antibiotic such as an extended-spectrum penicillin or for non critical infection a short course of cephalosporin, such as cefuroxime or ceftriaxone.

Duration

The duration of therapy should be minimised and documented in the notes and on the National Medication Chart. Empiric treatment should be reviewed after 48 – 72 hours. If all cultures and the MRO screen are negative, broad spectrum therapy can usually be de-escalated. If cultures are positive therapy should be narrowed to cover the pathogen.



References: 1. Kuti et al. Am J Health-Syst Pharm. 2003; 60;565-8. 2. EUCAST MIC distributions accessable via http://mic.eucast.org/Eucast2/

†Enterobacter, Serratia, Citrobacter, Acinetobacter, Proteus & Morganella