



## ANTIMICROBIAL DOSING RECOMMENDATIONS FOR ADULT PATIENT RECEIVING PERITONEAL DIALYSIS

Antibiotic	Intraperitoneal dose (preferred route for peritonitis)	IV dose (for systemic infections)	Oral dose
<b>Amoxicillin-clavulanate</b>			500 mg/125 mg PO TID OR 875 mg/125 mg PO BID
<b>Ampicillin</b>		2000 mg IV q12h	
<b>Ampicillin-sulbactam</b>		3000 mg IV q12h	
<b>Cefazolin<sup>a</sup></b>	2000 mg IP q48h	1000 mg IV daily	
<b>Cefepime<sup>a</sup></b>	2000 mg IP q48h	1000 mg IV daily	
<b>Ceftazidime<sup>a</sup></b>	2000 mg IP q48h	1000 mg IV daily	
<b>Ciprofloxacin</b>		400 mg IV q12h	750 mg PO daily
<b>Daptomycin</b>	300 mg IP daily (NOT for systemic infection) <sup>b</sup>	6 mg/kg IV q48h OR 10 mg/kg IV q48h ( <i>Enterococcus</i> only)	
<b>Ertapenem</b>		500 mg IV daily	
<b>Fluconazole</b>		200 mg IV q48h	200 mg PO q48h
<b>Gentamicin</b>	0.6 mg/kg IP daily (NOT for systemic infection) <sup>b</sup>		
<b>Levofloxacin</b>			250 mg PO daily
<b>Meropenem<sup>a</sup></b>	1000 mg IP daily	1000 mg IV daily	
<b>Tobramycin</b>	0.6 mg/kg IP daily (NOT for systemic infection) <sup>b</sup>		
<b>Vancomycin<sup>a,c</sup></b>	15 – 20 mg/kg IP q72 – 96h	15 – 20 mg/kg IV q72 – 96h	

<sup>a</sup> Has excellent bioavailability when given intraperitoneally and therefore may be used intraperitoneally to treat systemic infections. ID and nephrology consultation recommended

<sup>b</sup> Dose indicated is for treatment of peritonitis **only**

<sup>c</sup> Vancomycin has highly variable kinetics. Doses should be adjusted to maintain a pre-dwell trough of 15 – 20 mcg/mL

Use typical end-stage renal disease/dialysis dosing for all other medications not specifically listed

Bioavailability of the listed beta lactam antibiotics and vancomycin, as measured by 24-hour area under the curve, approaches 100% when administered intraperitoneally.<sup>1,2,3,4,5,6</sup> Therefore, the intraperitoneal route is a viable route of administration for the treatment of systemic infections and may be preferred in situations where placement of a central venous catheter is undesirable and the oral route is not possible. These uses must be discussed with nephrology to identify whether dialysis prescription changes are warranted.

## References

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5. Wiesholzer M, Pichler P, Reznicek G, et al. An Open, Randomized, Single-Center, Crossover Pharmacokinetic Study of Meropenem after Intraperitoneal and Intravenous Administration in Patients Receiving Automated Peritoneal Dialysis. *Antimicrob Agents Chemother*. 2016;60(5):2790-2797. doi:10.1128/AAC.02664-15
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*The recommendations in this guide are meant to serve as treatment guidelines for use at Michigan Medicine facilities. If you are an individual experiencing a medical emergency, call 911 immediately. These guidelines should not replace a provider's professional medical advice based on clinical judgment, or be used in lieu of an Infectious Diseases consultation when necessary. As a result of ongoing research, practice guidelines may from time to time change. The authors of these guidelines have made all attempts to ensure the accuracy based on current information, however, due to ongoing research, users of these guidelines are strongly encouraged to confirm the information contained within them through an independent source.*

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