

Table I. Treatment regimens for complicated urinary tract infection (known organism and susceptibility). FDA, US Food and Drug Administration; IV, intravenously; VRE, vancomycin-resistant Enterococcus. *
Aminoglycosides can be used alone or in combination (preferred) and should be avoided if the serum creatinine is elevated or obstruction is suspected.

Organism	Antibiotic	Dose	Alternative
	<u>ORAL Therapy</u>		
<i>Escherichia coli</i> <i>Klebsiella sp.</i> <i>Proteus sp.</i> other gram-negative rod	Trimethoprim-sulfamethoxazole	One double strength tablet twice daily (oral)	Ampicillin-clavulanate 875mg twice a day (oral) Cefuroxime axetil (oral) 250-500mg twice a day Cepodoxime proxetil (oral) 200mg twice a day
	Ciprofloxacin	500mg twice daily or 1,000 extended release every day (oral)	
	Levofloxacin	500-750mg every day (oral)	
	Nitrofurantion (cystitis only)	100mg twice a day (oral)	
	<u>IV Therapy</u>		
	Ceftriaxone	1g twice a day (IV)	Ampicillin/sulbactam 3g every 6 hours (IV) Piperacillin/tazobactam 3.375mg every 8 hours (IV) Ticarcillin/clavulanate 3.1g every 4-6 hours (IV) Imipenem-cilastin 500mg every 8 hours (IV) Ertapenem 1g every day (IV) Meropenem 500mg every 8 hours (IV) Doripenem 500mg every 8 hours (IV)
	Ciprofloxacin	400mg twice a day (IV)	
	Levofloxacin	500-750mg every day (IV)	
	<u>Aminoglycosides*</u> Gentamicin	<u>3-5mg/kg per day in 2-3 divided doses IV</u>	
	Tobramycin	<u>3-5mg/kg per day in 2-3 divided doses IV</u>	
	Amikacin	<u>7.5mg/kg every 12 hours IV</u>	
Known or suspected extended spectrum beta-lactamase	Imipenem-cilastin	500mg every 8 hours	Nitrofurantion 100mg twice daily (oral) (cystitis only) Fosfomycin 3g single dose sachet (oral) every other day for three doses (cystitis only and if no other active agent; not FDA approved for complicated cystitis)
	Ertapenem	1g every day	
	Meropenem	500mg every 6-8 hours IV	
	Doripenem	500mg every 8 hours IV	
<i>Enterococcus</i>	Amoxicillin	500mg every 8 hours (oral)	Ampicillin-clavulanate 875mg twice a day (oral)
	Ampicillin	1-2g every 6 hours (IV)	Ampicillin-sulbactam 1.5g every 6 hours (IV)

	Vancomycin	15-20mg/kg/dose every 8-12 hours (IV)	Linezolid 600mg twice daily IV or oral (if VRE and no other active agents; not FDA approved for this indication) Daptomycin 4mg/kg every 24 hours IV (if VRE and no other active agents; not FDA approved for this indication)
	Nitrofurantion (cystitis only)	100mg twice daily (oral)	
	Fosfomycin (cystitis only)	3g sachet (single dose) (oral)	
<i>Pseudomonas aeruginosa</i>	Ciprofloxacin	500mg twice daily or 1,000mg extended release every day (oral) OR 400mg twice daily IV	Levofloxacin 750mg (IV or oral daily)
	Cefepime	2g every 12 hours IV	
	Ceftazidime	2g every 8 hours IV	
	Piperacillin-tazobactam	3.375g every 6 hours OR 4.5g every 8 hours IV	
	Ticarcillin-clavulanate	3.1g every 4 hours IV	
	Aztreonam	2g every 8 hours IV	
	<u>Aminoglycosides</u>	3-5mg/kg per day in 2-3 divided doses IV	
	Gentamicin	3-5mg/kg per day in 2-3 divided doses IV	
	Tobramycin	3-5mg/kg per day in 2-3 divided doses IV	
	Amikacin	7.5mg/kg every 12 hours IV	
	Meropenem	500mg every 6-8 hours IV	Imipenem
	Doripenem	500mg every 8 hours IV	500mg every 6 hours IV