

**Table I. Treatment Regimens for Complicated UTI (known organism and susceptibility)**

Organism	Antibiotic	Dose	Alternative	
	<b><u>ORAL Therapy</u></b>			
<b>E. coli Klebsiella sp Proteus sp other gram negative rod</b>	Trimethoprim-sulfamethoxazole	One DS tablet bid (Oral)	Ampicillin-clavulanate 875 mg bid (oral) Cefuroxime axetil (oral) 250-500 mg bid Cepodoxime proxetil (oral) 200 mg bid	
	Ciprofloxacin	500 mg bid or 1000XR qd (Oral)		
	Levofloxacin	500 – 750 mg qd (Oral)		
	Nitrofurantion (cystitis only)	100 mg bid (oral)		
	Fosfomycin	3 gm sachet (single dose x 1 or qod) (oral)		
	<b><u>IV Therapy</u></b>			
	Ceftriaxone	1 gm bid (IV)	Ampicillin/sulbactam 3 gm q 6h (IV)	
	Ciprofloxacin	400 mg bid (IV)		
	Levofloxacin	500 – 750 mg qd (IV)	Piperacillin/tazobactam 3.375 mg q 8h (IV)	
	<u>Aminoglycosides*</u> Gentamicin	<u>3-5 mg/kg per day in 2-3 divided doses IV</u>	Ticarcillin/clavulanate 3.1 gm q 4-6h (IV)	
Tobramycin	<u>3-5 mg/kg per day in 2-3 divided doses IV</u>	Imipenem-cilastin 500 mg q 8h (IV)		
Amikacin	<u>7.5 mg/kg q 12h IV</u>	Ertapenem 1 gm qd (IV) Meropenem 500 mg q8h (IV) Doripenem 500 mg q8h (IV)		
<b>Known or Suspected Extended Spectrum Beta-lactamase (ESBL)</b>	Imipenem-cilastin	500 mg q 8h	Nitrofurantion 100 mg bid (oral) (cystitis only)  Fosfomycin 3 gm single dose sachet (oral) every other day for 3 doses (cystitis only and if no other active agent; not FDA approved for complicated cystitis)	
	Ertapenem	1 gm qd		
	Meropenem	500 mg q 6-8h IV		
	Doripenem	500 mg q8h IV		
<b>OR  SIRS, awaiting susceptibility results</b>	ceftazidime-avibactam  (consider for ESBLs or KPCs)	2.5 gm q8h IV		
	ceftolozane-tazobactam	1.5 gm q q8h IV		

	(consider for ESBLs)		
<b>Enterococcus</b>	Amoxicillin	500 mg every 8h (Oral)	Ampicillin-clavulanate 875 mg bid (oral)
	Ampicillin	1-2 gm q 6h (IV)	Ampicillin-sulbactam 1.5 gm q 6h (IV)
	Vancomycin	15-20 mg/kg/dose every 8-12h (IV)	Linezolid 600 mg bid IV or oral (if VRE and no other active agents; not FDA approved for this indication)
	Nitrofurantion (cystitis only)	100 mg bid (oral)	Daptomycin 4 mg/kg q24h IV (if VRE and no other active agents; not FDA approved for this indication)
	Fosfomycin	3 gm sachet (single dose) (oral)	
<b>Pseudomonas aeruginosa</b>	Ciprofloxacin	500 mg bid or 1000XR qd (Oral) OR 400 mg bid IV	Levofloxacin 750 mg (IV or Oral qd)
	Cefepime	2 gm q 12h IV	
	Ceftazidime	2 gm q 8h IV	
	Piperacillin-tazobactam	3.375 gm q 6h OR 4.5 gm q 8h IV	
	Ticarcillin-clavulanate	3.1 gm q 4h IV	
	Aztreonam	2 gm q 8h IV	

<u>Aminoglycosides</u>		
Gentamicin	3-5 mg/kg per day in 2-3 divided doses IV	
Tobramycin	3-5 mg/kg per day in 2-3 divided doses IV	
Amikacin	7.5 mg/kg q 12h IV	
Meropenem	500 mg q 6-8 h IV	Imipenem
Doripenem	500 mg q8h IV	500 mg q 6h IV
ceftazidime-avibactam	2.5 gm q8h IV	
ceftolozane-tazobactam (consider for multi-drug resistant Pseudomonas)	1.5 gm q q8h IV	

DS = double-strength; VRE = vancomycin resistant enterococci;

\* Aminoglycosides can be used alone or in combination (preferred) and should be avoided if the serum creatinine is elevated or obstruction is suspected