

Suggestions for laboratory parameters that should be monitored weekly during outpatient parenteral or oral antimicrobial therapy (OPAT)

Source: Practice Guidelines for Outpatient Parenteral antimicrobial Therapy. Clinical Infectious Disease 2004; 38:1661.

Antimicrobial Agent	Frequency of testing per week				Comments
	Complete Blood Count ^a	Renal Function tests ^b	Serum Potassium Level	Liver Enzymes	
Aminoglycosides	Once	Twice	*****	*****	Clinical monitoring for vestibular and hearing dysfunction at each visit; serum concentrations as clinically indicated
B-lactams (penicillins, cephalosporins, aztreonam, carbapenems)	Once	Once	*****	^c	
Anti-pseudomonal Penicillins	Once	Once	Once	*****	
Fluoroquinolones	*****	*****	*****	Once	
Clindamycin	Once	Once	*****	Once	
Daptomycin	Once	Once	*****	Once	CPK at least weekly
Linezolid	Once	*****	*****	*****	
Pentamidine	Twice	Twice	Twice		Blood glucose level daily; chemistry profile ^d twice per week
Sulfamethoxazole/trimethoprim	Once	Once	Once	*****	
Vancomycin	Once	Once	*****	*****	Serum levels as clinically indicated
Amphotericin B (including lipid formulations)	Once	Twice	Twice	Once	Magnesium level once per week
Azole antifungals	Once	Once	*****	Once	
Caspofungin	*****	*****	*****	Once	
Ganciclovir	Twice	Once	*****	*****	
Acyclovir	Once	Once	*****	*****	Magnesium level once per week
Foscarnet	Once	Twice	Twice	Once	Chemistry profile ^d with calcium and magnesium level once per week
Cidofovir	Once	Once	Once	*****	Urinalysis and chemistry profile once per week

^aShould include a differential count of leukocytes and platelet count.

^bRenal function tests may include serum creatinine and blood urea nitrogen levels and urinalysis. Trough levels appear to be the earliest indication of aminoglycoside toxicity.

^cWeekly liver enzyme tests with oxacillin, nafcillin, and carbapenems.

^dA chemistry profile should include liver enzyme levels as well as electrolyte levels