

Laboratory Monitoring Guideline for Outpatient Pediatric CF Antimicrobial Therapy

Antimicrobial Agent	Recommended Laboratory Monitoring
Aminoglycosides (amikacin, gentamicin, tobramycin)	Once weekly: CBC with differential, drug trough concentrations (if not adjusting doses) Twice weekly: BUN, SCr, Mg At start of therapy and every 1-2 years: hearing screening Treatment > 4 weeks: If stable for 4 weeks, can obtain labs every 2 weeks
Amphotericin B	Once weekly: CBC with differential, LFTs Twice weekly: BMP, Mg, Phos
Azole antifungals (fluconazole, itraconazole, voriconazole, posaconazole)	Once weekly: LFTs Treatment > 4 weeks: If stable for 4 weeks, can obtain labs every 2 weeks Drug trough concentrations: 5-7 days after initiation *Ensure both hydroxyl-itraconazole and itraconazole levels are ordered for itraconazole
Beta-lactams (penicillins, cephalosporins, carbapenems, monobactams)	Once weekly: CBC with differential, BUN, SCr, LFTs Treatment > 4 weeks: If stable for 4 weeks, can obtain labs every 2 weeks
Clindamycin	Once weekly: CBC with differential, BUN, SCr, LFTs
Echinocandins (anidulafungin, caspofungin, micafungin)	Once weekly: LFTs Treatment > 3 weeks: If stable for 3 weeks of treatment, can obtain labs every 2 weeks
Ethambutol	Once weekly: LFTs At start of therapy: ophthalmology exam Treatment > 4 weeks: If stable for 4 weeks, can obtain labs every 2 weeks
Fluoroquinolones (ciprofloxacin, levofloxacin, moxifloxacin)	Once weekly: LFTs Treatment > 4 weeks: If stable for 4 weeks, can obtain labs every 2 weeks
Glycopeptides (telavancin, vancomycin)	Once weekly: CBC with differential, vancomycin trough* Twice weekly: BUN, SCr *First trough prior to 4 th dose if initiated as outpatient
Oxazolidinones (linezolid, tedizolid)	Once weekly: CBC with differential Treatment > 4 weeks: If stable for 4 weeks, can obtain labs every 2 weeks
Rifampin	Once weekly: CBC with differential, LFTs Treatment > 4 weeks: If stable for 4 weeks, can obtain labs every 2 weeks
Tigecycline	Once weekly: CBC with differential, LFTs Treatment > 4 weeks: If stable for 4 weeks, can obtain labs every 2 weeks