

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 |