

Table 3. Second Line Drugs

Drug	Daily Dose (Max. Dose)	Adverse Reactions	Monitoring	Comments
Capreomycin	15 mg/kg (1 g)	Toxicity-auditory -vestibular -renal	Assess vestibular and hearing function Measure renal function and serum drug levels	After bacteriologic conversion, dosage may be reduced to 2-3 times per week
Kanamycin	15 mg/kg (1 g)	Toxicity-auditory -vestibular -renal	Assess vestibular and hearing function Measure renal function and serum drug levels	After bacteriologic conversion, dosage may be reduced to 2-3 times per week
Amikacin	15 mg/kg (1 g)	Renal toxicity Chemical imbalance Hearing loss Dizziness Vestibular dysfunction	Assess hearing function Measure renal function and serum drug levels	Not approved by FDA for TB treatment After bacteriologic conversion, dosage may be reduced to 2-3 times per week
Ethionamide	15-20 mg/kg (1 g)	GI upset Metallic taste Hepatotoxicity Bloating Hypersensitivity	Measure hepatic enzymes	Start with low dosage and increase as tolerated May cause hypothyroid condition, especially if used with PAS
Para-aminosalicylic acid	150 mg/kg (12 g)	GI upset Hypersensitivity Hepatotoxicity Sodium load	Measure hepatic enzymes Assess volume status	Start with low dosage and increase as tolerated Monitor cardiac patients for sodium load

Cycloserine	15-20 mg/kg (1 g)	Psychosis Headaches Convulsions Rash Depression Drug interactions	Assess mental status Measure serum drug levels	Start with low dosage and increase as tolerated Pyridoxine may decrease CNS effects
Ofloxacin	400-800 mg/day	GI upset Drug interactions Dizziness Headaches Hypersensitivity Restlessness	Drug interactions	Not approved by FDA for TB treatment Should not be used in children Avoid: antacids, zinc, iron, sucralfate
Levofloxacin	500-750 mg/day	GI upset Drug interactions Dizziness Headaches Hypersensitivity Restlessness	Drug interactions	Not approved by FDA for TB treatment Should not be used in children Avoid: antacids, iron, zinc, sucralfate
Moxifloxacin	400 mg/day	GI upset Drug interactions Dizziness Headaches Hypersensitivity Restlessness	Drug interactions	Not approved by FDA for TB treatment Should not be used in children Avoid: antacids, iron, zinc, sucralfate
Gatifloxacin	400 mg/day	GI upset Drug interactions Dizziness Headaches Hypersensitivity Restlessness	Drug interactions	Not approved by FDA for TB treatment Should not be used in children Avoid: antacids, iron, zinc, sucralfate

Notes: Doses for children same as for adults. Use these drugs only in consultation with a clinician experienced in the management of drug-resistant TB.

Adjust weight-based dosages as weight changes. Source: Adapted from reference #7