Strategies for Monitoring and Improving Adherence in Nontuberculous Mycobacteria (NTM)

DRUG	ADVERSE REACTIONS	MONITORING	STRATEGY
Azithromycin/ clarithromycin	Gastrointestinal	Clinical monitoring	Change clarithromycin to azithromycinMove administration to bedtimeTake with small starch
	Metallic tasteDysgeusia	Clinical monitoring	Change clarithromycin to azithromycin
	•Tinnitus/hearing loss	Audiogram	• Interruption/change to thrice weekly
	Hepatotoxicity	• Liver function tests	Hold medication and re-challenge with mild hepatitis to determine etiology
	• Prolonged QTc	• ECG (QTc)	 Stop concomitant QT prolonging medications May be rate limiting toxicity
Ethambutol	Ocular toxicity	 Visual acuity/color discrimination Read fine print every day of the same font 	Stop medication immediately and see an ophthalmologistRate limiting toxicity
	Neuropathy	Clinical monitoring	Rate limiting toxicity
Rifampin/rifabutin	Hepatotoxicity	• Liver function test	Hold medication and re-challenge with mild hepatitis to determine etiology
	Cytopenia	Complete blood count	 Continue medication with mild leukocytopenia Stop if the platelet count drops significantly (ITP)
	Hypersensitivity	Clinical monitoring	Stop medication
	Orange discoloration	Clinical monitoring	Reassure patient orange discoloration of secretions is expected
	• Uveitis (rifabutin)	Visual acuity	Rate limiting toxicityConsider re-challenging with rifampin
Amikacin (parenteral)	• Ototoxicity	Audiogram	May be rate limiting
	•Tinnitus	Clinical monitoring	Stop other medications that can cause tinnitusMay be rate limiting
	Vestibular toxicity	Clinical monitoring	Rate limiting toxicity
	Nephrotoxicity	• BUN, creatinine	Maintain hydrationStop unnecessary medications that may affect renal function
	Electrolyte disturbances	Metabolic panel	Correct electrolyte abnormalities prior to initiation



Supported by an Educational Grant from Insmed. © National Jewish Health, 2020.

Reference: Based on expert opinion for the monitoring and management of side effects. Daley CL, laccarino JM, Lange C, et al. Treatment of Nontuberculous Mycobacterial Pulmonary Disease: An Official ATS/ERS/ESCMID/IDSA Clinical Practice Guideline: Executive Summary. Clin Infect Dis. 2020. https://doi.org/10.1093/cid/ciaa241.