## PROVIDER'S GUIDE TO LATENT TUBERCULOSIS TREATMENT IN HIV

The purpose of this guide is to provide HIV practitioners with a quick reference for the treatment of latent tuberculosis infection (LTBI) in patients on antiretrovirals. The CDC and National Tuberculosis Controllers Association preferentially recommend short-course rifamycin-based, 3- or 4-month LTBI treatment regimens over 6- or 9-month isoniazid monotherapy. Many antiretrovirals (ARVs) are CYP3A4 substrates, which limits the use of rifamycins without modification of ARV regimens. The HIV practitioner should discuss risks vs benefits of shorter LTBI therapy that may require ARV modification vs longer LTBI therapy with potentially more side effects but less drug interactions.

Regimen	Medications	Duration	Dosing for Adults	Frequency	Potential Disadvantages
ЗНР	INH + RPT	3 months	INH: 15 mg/kg; max dose is 900 mg RPT: 10—14.0 kg - 300 mg 14.1—25.0 kg - 450 mg 25.1—32.0 kg - 600 mg 32.1—49.9 kg - 750 mg ≥50.0 kg - 900 mg max dose	Once weekly	Medication cost     Multiple pills taken simultaneously (i.e., 10 pills once weekly compared with 2-3 daily)     Potential for systemic drug reaction or influenza-like syndrome that can include syncope and hypotension     Patients >65 years are at an increased risk of hypertensive events and middle aged (35-65 years) patients are at increased risk of systemic drug reactions (flu-like syndrome and urticaria)
3HR	INH + RIF	3 months	INH: 5 mg/kg; max dose is 300 mg RIF: 10 mg/kg; max dose is 600 mg	Daily	Many drug interactions     Hepatotoxicity     Rifabutin has fewer or less pronounced drug interactions and may be used in place of RIF when RIF is contraindicated due to drug-drug interactions and 3HP or INH cannot be used
4R	RIF	4 months	RIF: 10 mg/kg; max dose is 600 mg	Daily	Many drug interactions     Rifabutin has fewer or less pronounced drug interactions and may be used in place of RIF when RIF is contraindicated due to drug-drug interactions and 3HP or INH cannot be used
6H	INH	6 months	INH: 5 mg/kg; max dose is 300 mg	Daily	Hepatotoxicity
			INH: 15 mg/kg; max dose is 900 mg	Twice weekly	Early discontinuation due to adverse effects
9H	INH	9 months	INH: 5 mg/kg; max dose is 300 mg	Daily	Hepatotoxicity
			INH: 15 mg/kg; max dose is 900 mg	Twice weekly	Early discontinuation due to adverse effects

INH = isoniazid; RIF = rifampin; RPT = rifapentine Preferred Regimen in HIV This conference is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award totaling \$4,067,580 with zero percentage financed with nongovernmental sources. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by HRSA, HHS or the U.S. Government.



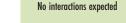
## DRUG INTERACTIONS BETWEEN LATENT TUBERCULOSIS INFECTION TREATMENT AND ANTIRETROVIRALS

LTBI Medication	NRTIs	NNRTIs	INSTIs	Pls	Entry Inhibitors
	TAF	DOR	BIC		MVC
	TDF	RPV	DTG		
Isoniazid	3TC	EFV	CAB	All PIs	IBA
	FTC	ETR	EVG		
	ABC	NVP	RAL		FTR
	TAF	DOR	BIC		MVC 600 mg BID
	TDF	RPV	DTG 50 mg BID	All Pls	MINE OUD HIS DID
Rifampin	3TC	EFV 600 mg daily	CAB		IBA
	FTC	ETR	EVG		
	ABC	NVP	RAL 800 mg BID		FTR
	TAF	DOR	BIC		MVC 600 mg BID in
	TDF	RPV	DTG (if suppressed)	All Pls	absence of PI
Weekly rifapentine	3TC	EFV	CAB		IBA
	FTC ETR		EVG		
	ABC	NVP	RAL		FTR

KEY: 3TC = lamivudine; ABC = abacavir; BIC = bictegravir; CAB = cabotegravir; DOR = doravirine; DTG = dolutegravir; EFV = efravirenz; ETR = etravirine; EVG = elvitegravir; FTC = emtricitabine; FTR = fostemsavir; IBA = ibalizumab; INSTI = integrase strand transfer inhibitor; LTBI = latent tuberculosis infection; MVC = maraviroc; NRTI = nucleoside reverse transcriptase inhibitor; NNRTI = nucleoside reverse transcriptase inhibitor; NNRTI = non-nucleoside reverse transcriptase inhibitor; NVP = nevirapine; PI = protease inhibitor; RAL = raltegravir; RPV = rilpivirine; TAF = tenofovir alafenamide; TDF = tenofovir disoproxil fumarate

References: 1. Panel on Antiretroviral Guidelines for Adults and Adolescents. Guidelines for the Use of Antiretroviral Agents in Adults and Adolescents with HIV. Department of Health and Human Services. Available at <a href="https://dinicalinfo.hiv.gov/en/guidelines/hiv-clinical-guidelines-adult-and-adolescent-ary/whats-new-guidelines">https://dinicalinfo.hiv.gov/en/guidelines/hiv-clinical-guidelines-adult-and-adolescent-ary/whats-new-guidelines</a>. Accessed Feb 7, 2023.

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Not recommended

Dose adjustment required

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