

Updates in TB Preventive Therapy Guidelines

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Last Updated: 6 May 2021

Disclosures

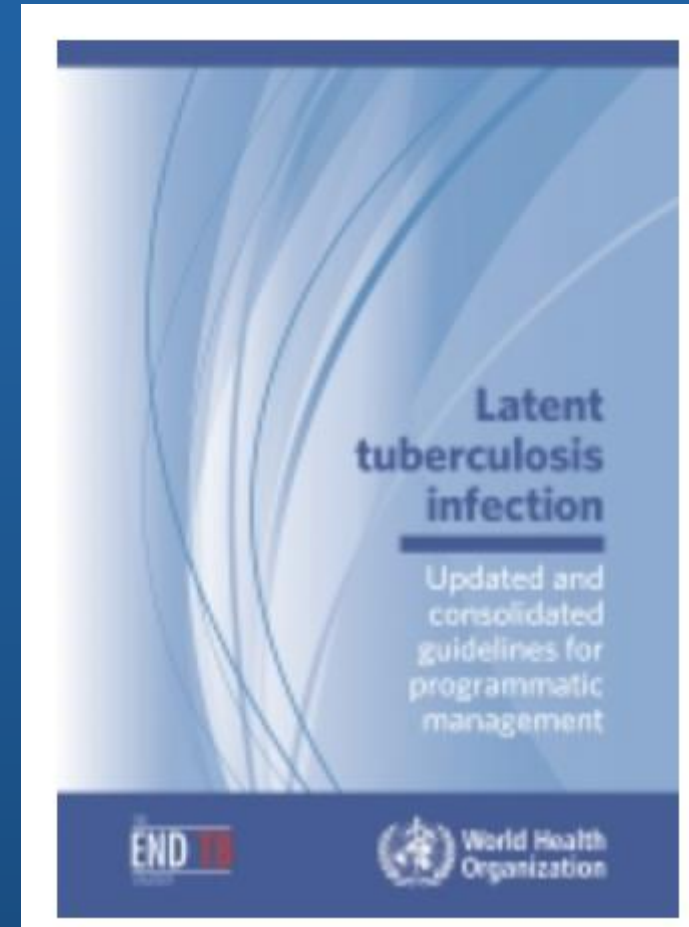
Grant funding from Vir Biotechnology

TB prevention for PLWH

- TB is the leading cause of death for PLWH worldwide
- Treating latent TB infection (LTBI) in PLWH reduces:
 - TB incidence
 - TB mortality
 - Overall mortality in excess of benefit of ART alone (*Ross JM, Lancet ID, 2021*)
- New evidence → changes in screening and treatment of LTBI

WHO/Global Guidelines

- Updated 2018
- Screen all people with HIV for active TB
- In high-burden settings, treat LTBI if active TB excluded.
 - 9H, 6H, 3HP



CDC Guidelines - 2020

Centers for Disease Control and Prevention

MMWR

Morbidity and Mortality Weekly Report

Recommendations and Reports / Vol. 69 / No. 1

February 14, 2020

**Guidelines for the Treatment of Latent Tuberculosis
Infection: Recommendations from the
National Tuberculosis Controllers Association
and CDC, 2020**

Regimen	Medication (s)	Duration	Dosing
3HR	Isoniazid & Rifampicin	3 months	Daily
3HP	Isoniazid & RifaPENTine	3 months	Weekly
4R	Rifampicin	4 months	Daily
9H	Isoniazid	9 months	Daily
6H	Isoniazid	6 months	Daily

LTBI treatment guidelines continued

- Rifamycin-containing regimens preferred if possible
- Short-course → Better treatment-completion rates
 - (12 weeks, 3M, 4M)
- Drug-drug interactions with rifamycins can be limiting
 - warfarin
 - hormonal contraceptives
 - antiepileptic drugs
 - glucocorticoids
 - opioids
 - antiretrovirals
- INH-only: 9M higher treatment success than 6M; 6M lower risk of hepatotoxicity. Current recommendations (2020):
 - 6M>9M

Rifampicin & Rifapentine interactions with key ARVs

- INSTIs:
 - bictegravir: NO (rifampicin/rifapentine **contraindicated** with bictegravir – lowers concentration below therapeutic threshold)
 - dolutegravir: OK; if RIF/RPT given daily, increase to bid DTG
 - raltegravir: OK, if RIF given daily, double dose during and for 2 weeks after end of RIF (no change if weekly RPT)
- Cobi: no RIF
- TAF: Not preferred. TDF with RIF ok. PK concerns
- PIs: RIF interacts/contraindicated with most.
Lopinavir/ritonavir can be given, but must be double dose during and for 2 weeks after end of RIF

TPT and ART

Regimen	Medication (s)	Duration	ART
3HR	Isoniazid & Rifampicin	3M daily	TDF/FTC/ DTG bid or TDF/FTC/EFV
3HP	Isoniazid & RifaPENTine	3M weekly	TDF/FTC/DTG or TDF/FTC/EFV
4R	Rifampicin	4M daily	TDF/FTC/ DTG bid or TDF/FTC/EFV
9H	Isoniazid	9M daily	No change to ART
6H	Isoniazid	6M	No change to ART

Evidence, but not yet guidelines:

ORIGINAL ARTICLE

One Month of Rifapentine plus Isoniazid to Prevent HIV-Related Tuberculosis

Susan Swindells, M.B., B.S., Ritesh Ramchandani, Ph.D., Amita Gupta, M.D., Constance A. Benson, M.D., Jorge Leon-Cruz, M.S., Noluthando Mwelase, M.B., Ch.B., Marc A. Jean Juste, M.D., Javier R. Lama, M.D., M.P.H., Javier Valencia, M.D., Ayotunde Omoz-Oarhe, M.D., Khuanchai Supparatpinyo, M.D., Gaerolwe Masheto, M.D., *et al.*, for the BRIEF TB/A5279 Study Team*

March 14, 2019

N Engl J Med 2019; 380:1001-1011

DOI: 10.1056/NEJMoa1806808

Regimen	Medication (s)	Duration	Dosing
1HP	Isoniazid & RifaPENTine	1 month	Daily

- Noninferior to 9M INH in PLWH taking EFV-based ART
- No studies with DTG/INSTI ART
- Likely would need to switch to bid DTG

Acknowledgment

The Mountain West AIDS Education and Training (MWAETC) program 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 \$2,990,665 with 0% financed with non-governmental sources.

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