

3. Ross JM, Badje A, Rangaka MX, Walker AS, Shapiro AE, Thomas KK, et al. Isoniazid preventive therapy plus antiretroviral therapy for the prevention of tuberculosis: a systematic review and meta-analysis of individual participant data. *Lancet HIV*. 2021;8:e8–15. [https://doi.org/10.1016/S2352-3018\(20\)30299-X](https://doi.org/10.1016/S2352-3018(20)30299-X)
4. Churchyard G, Cárdenas V, Chihota V, Mngadi K, Sebe M, Brumskine W, et al.; WHIP3TB Study Team. Annual tuberculosis preventive therapy for persons with HIV infection: a randomized trial. *Ann Intern Med*. 2021; 174:1367–76. <https://doi.org/10.7326/M20-7577>

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In Response: We appreciate Dr. Chen's thoughtful comments (1) regarding our dispatch article (2). In that analysis, we used routinely collected programmatic data to describe the risk of developing tuberculosis (TB) after TB preventive therapy (TPT) among persons living with HIV initiating antiretroviral therapy (ART) and did not aim to estimate a causal effect between TPT and TB. However, as Chen notes, comparisons on the basis of TPT completion are susceptible to immortal time bias and might overestimate the association between TPT exposure and TB

incidence. That bias is a common gap in published literature on TB after TPT (3,4).

To address that concern, we re-analyzed the data by treating TPT exposure as a time-varying variable, allowing person-time to be appropriately classified across not started, incomplete, and complete exposure states during follow-up. In that revised analysis, adjusted incidence rate ratios (IRRs) were somewhat smaller but remained statistically significant and followed the same pattern as the previous analysis. Compared with periods following TPT completion, TB incidence was higher during incomplete TPT (adjusted IRR 1.4, 95% CI 1.3–1.5) and among those who did not initiate TPT (adjusted IRR 2.2, 95% CI 1.9–2.5).

The smaller effect estimates are consistent with what we would expect after correcting for this bias, and the fact that the overall pattern held reinforces confidence in the original findings. Our findings highlight both the value of routine programmatic data for understanding real-world TB risk and the importance of appropriate analytic approaches when interpreting such data.

References

1. Chen Q. Tuberculosis after preventive therapy in persons living with HIV recently initiating antiretroviral therapy. *Emerg Infect Dis*. 2026;32:1381–82.
2. Templin L, Varajidas Y, Respeito D, Zindoga P, Weiss D, Nguimfack A, et al. Tuberculosis after TB preventive therapy in persons living with HIV recently initiating antiretroviral therapy, Mozambique. *Emerg Infect Dis*. 2026;32:409–13. <https://doi.org/10.3201/eid3203.251349>
3. Turinawe G, Asaasira D, Kajumba MB, Mugumya I, Walusimbi D, Tebagalika FZ, et al. Active tuberculosis disease among people living with HIV on ART who completed tuberculosis preventive therapy at three public hospitals in Uganda. *PLoS One*. 2024;19:e0313284. <https://doi.org/10.1371/journal.pone.0313284>
4. Agarwal R, Nyendak M, Chava N, Allam RR, Moonan PK, Sriram CS, et al. Long-term protection from tuberculosis preventive treatment among people with HIV in a high-burden tuberculosis setting: an observational cohort study from India. *Clin Infect Dis*. 2025;81:970–9. <https://doi.org/10.1093/cid/ciaf322>

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