

completed to date).¹⁹³ However, adjunctive corticosteroid therapy is recommended for all people with HIV and TB meningitis **(AII)** and precludes the need for pre-emptive use of prednisone to prevent IRIS. Whether the corticosteroid regimen recommended as adjunctive therapy for TB meningitis also further reduces the risk of TB IRIS and its consequences has not been evaluated.

In summary, early ART initiation requires close collaboration between HIV and TB care clinics, expertise in the management of ARV regimen selection, close monitoring, potential adjunctive corticosteroid therapy, and support and adherence services. The prevention and management of IRIS are discussed in detail below (see [TB-Associated IRIS](#), below).

When TB occurs in people already on ART, treatment for TB must be started immediately **(AIII)**, and ART should be modified to reduce the risk of drug interactions and to maintain virologic suppression. When TB occurs in the setting of virologic failure, ART drug-resistance testing should be performed, and intensified adherence counseling should be provided. A new ARV regimen may be required to achieve virologic suppression and minimize drug interactions with the anti-TB regimen.

Drug–Drug Interactions in the Treatment of HIV-Related TB

Dolutegravir in combination with two nucleoside(tide) reverse transcriptase inhibitors, including tenofovir disoproxil fumarate (TDF), tenofovir alafenamide (TAF), abacavir, emtricitabine, or lamivudine, is the preferred regimen for co-treatment of HIV in most ART-naïve people with TB **(AI)**. This regimen can be managed with rifamycin-based anti-TB treatment (see [Integrase Inhibitor section](#) below for recommendations about dolutegravir dose adjustment if coadministered with rifampin). The following text summarizes the most important drug-drug interactions for antiretroviral drugs and anti-TB drugs to guide choices if other ART regimens are considered.

The rifamycin class of antibiotics is the cornerstone of effective and shorter-course first-line treatments for drug-sensitive TB. The currently available rifamycins (rifampin, rifabutin, and rifapentine) have clinically significant interactions with several ARV drugs. Most of these result from the rifamycin's potent induction of genes involved in the metabolism and transport of ARV agents, and these interactions should be taken into consideration before initiating therapy (see [Dosing Recommendations for Use of ARV and Anti-TB Drugs for Treatment of Active Drug Sensitive TB](#) above, and the [Tuberculosis/HIV Coinfection section of the Adult and Adolescent Antiretroviral Guidelines](#)). Every effort should be made to include a rifamycin in the TB treatment regimen. Rifamycins remain the most potent drug class for TB treatment. Older regimens that included only 2 months of rifampin were associated with increased risks of treatment failure and TB recurrence among people with HIV-related TB.^{199,200} If a rifamycin cannot be used, TB treatment duration must be extended, and treatment complexity increases substantially. Thus, individuals with rifamycin-susceptible *M. tuberculosis* isolates should be treated with a regimen that includes a rifamycin unless a serious adverse event is highly likely due to a rifamycin **(AIII)**.

No clinical trial has specifically compared rifampin- and rifabutin-containing anti-TB regimens among people with HIV and TB taking ART. Rifabutin is generally regarded as a reasonable substitute for rifampin for the treatment of active TB disease in people with HIV who concurrently receive ARVs that have adverse drug interactions with rifamycins, because rifabutin is a less potent inducer of CYP3A4 than rifampin.²⁰¹ Although clinical trial data among people with HIV are limited to one small study, observational data among people with HIV, and several trials among people without HIV have found similar outcomes between those treated with rifampin or rifabutin.²⁰²⁻²⁰⁵