Table 1. Chemoprophylaxis to Prevent First Episode of Opportunistic Disease

This table provides recommendations for the use of chemoprophylaxis to prevent the first episode of opportunistic disease. For the use of immunizations to prevent hepatitis A virus, hepatitis B virus, human papillomavirus, influenza A and B viruses, *Streptococcus pneumoniae,* and varicella-zoster virus infections, please refer to the Immunizations for Preventable Diseases in Adults and Adolescents Living with HIV section.

(Last reviewed and updated December 10, 2021)

Opportunistic Infections	Indication	Preferred	Alternative
Coccidioidomycosis	A new positive IgM or IgG serologic test in patients who live in a disease-endemic area and with CD4 count <250 cells/µL **(BIII)**	Fluconazole 400 mg PO daily **(BIII)**	
***Histoplasma capsulatum* infection**	CD4 count ≤150 cells/µL and at high risk because of occupational exposure or live in a community with a hyperendemic rate of histoplasmosis (>10 cases/100 patient-years) **(BI)**	Itraconazole 200 mg PO daily **(BI)**	
Malaria	Travel to disease-endemic area	Recommendations are the same for HIV-infected and HIV-uninfected patients. Recommendations are based on the region of travel, malaria risks, and drug susceptibility in the region. Refer to the Centers for Disease Control and Prevention webpage for the most recent recommendations based on region and drug susceptibility: Malaria.	

Opportunistic Infections	Indication	Preferred	Alternative
***Mycobacterium avium* complex (MAC) disease**	CD4 Count <50 cells/mm^3 **Not recommended** for those who immediately initiate ART **(AII).** Recommended for those who are not on fully suppressive ART, after ruling out active disseminated MAC disease **(AI).**	Azithromycin 1,200 mg PO once weekly **(AI),** *or* Clarithromycin 500 mg PO BID **(AI),** *or* Azithromycin 600 mg PO twice weekly **(BIII)**	Rifabutin (dose adjusted based on concomitant ART)[a] **(BI);** rule out active TB before starting rifabutin.
***Mycobacterium tuberculosis* infection (TB)** (i.e., treatment of latent TB infection [LTBI])	Positive screening test for LTBI,[b] with no evidence of active TB, and no prior treatment for active TB or LTBI **(AI),** *or* Close contact with a person with infectious TB, with no evidence of active TB, regardless of screening test results **(AI)**	(INH 300 mg plus pyridoxine 25–50 mg) PO daily for 9 months **(AII),** *or* LTBI treatment and ART act independently to decrease the risk of TB disease. Thus, ART is recommended for all persons with HIV and LTBI **(AI).**	Rifapentine (see dose below) PO plus INH 900 mg PO plus pyridoxine 50 mg PO once weekly for 12 weeks **(AII)** **Note:** Rifapentine is recommended only for persons receiving RAL or an EFV-based ART regimen *Rifapentine Weekly Dose* *Weighing 32.1 to 49.9 kg* • 750 mg *Weighing >50 kg* • 900 mg, *or* • Rifampin 600 mg PO daily for 4 months **(BI),** *or* • For persons exposed to drug-resistant TB, select anti-TB drugs after consultation with experts or public health authorities **(AII).**

Opportunistic Infections	Indication	Preferred	Alternative
***Pneumocystis* Pneumonia (PCP)**	CD4 count <200 cells/mm^3 **(AI),** *or* CD4 <14% **(BII),** *or* If ART initiation must be delayed, CD4 count ≥200 cells/mm^3, but <250 cells/mm^3 and if monitoring of CD4 cell count every 3 months is not possible **(BII)** **Note:** Patients who are receiving pyrimethamine/sulfadiazine for treatment or suppression of toxoplasmosis do not require additional PCP prophylaxis **(AII).**	TMP-SMX[c] 1 DS tablet PO daily **(AI)**, *or* TMP-SMX[c] 1 SS tablet daily **(AI)**	• TMP-SMX[c] 1 DS PO three times weekly **(BI),** *or* • Dapsone[d] 100 mg PO daily or 50 mg PO BID **(BI),** *or* • Dapsone[d] 50 mg PO daily with (pyrimethamine[e] 50 mg plus leucovorin 25 mg) PO weekly **(BI),** *or* • (Dapsone[d] 200 mg plus pyrimethamine[e] 75 mg plus leucovorin 25 mg) PO weekly **(BI);** *or* • Aerosolized pentamidine 300 mg via Respigard II™ nebulizer every month **(BI),** *or* • Atovaquone 1,500 mg PO daily **(BI),** *or* • (Atovaquone 1,500 mg plus pyrimethamine[e] 25 mg plus leucovorin 10 mg) PO daily **(CIII)**
Syphilis	For individuals exposed to a sex partner with a diagnosis of primary, secondary, or early latent syphilis within the past 90 days **(AII),** *or* For individuals exposed to a sex partner >90 days before syphilis diagnosis in the partner, if serologic test results are not available immediately and the opportunity for follow-up is uncertain **(AIII)**	Benzathine penicillin G 2.4 million units IM for 1 dose **(AII)**	For penicillin-allergic patients: • Doxycycline 100 mg PO BID for 14 days **(BII),** *or* • Ceftriaxone 1 g IM or IV daily for 8–10 days **(BII),** *or* • Azithromycin 2 g PO for 1 dose **(BII)—not recommended** for men who have sex with men or pregnant people **(AII)**

Opportunistic Infections	Indication	Preferred	Alternative
Talaromycosis (Penicilliosis)	Persons with HIV and CD4 cell counts <100 cells/mm^3, who are unable to have ART, or have treatment failure without access to effective ART options, and— • Who reside in the highly endemic regions* in northern Thailand, northern or southern Vietnam, or southern China **(BI),** *or* • Who are from countries outside of the endemic region, and must travel to the region **(BIII)** * Particularly in highland regions during the rainy and humid months	For persons who reside in endemic areas, itraconazole 200 mg PO once daily **(BI).** For those traveling to the highly endemic regions, begin itraconazole 200 mg PO once daily 3 days before travel, and continue for 1 week after leaving the endemic area **(BIII).**	For persons who reside in endemic areas, fluconazole 400 mg PO once weekly **(BII)**. For those traveling to the highly endemic regions, take the first dose of fluconazole 400 mg 3 days before travel, continue 400 mg once weekly, and take the final dose after leaving the endemic area **(BIII).**
***Toxoplasma gondii* encephalitis**	Toxoplasma IgG-positive patients with CD4 count <100 cells/µL **(AII)** **Note:** All regimens recommended for primary prophylaxis against toxoplasmosis also are effective as PCP prophylaxis.	TMP-SMX[a] 1 DS PO daily **(AII)**	• TMP-SMX[c] 1 DS PO three times weekly **(BIII),** *or* • TMP-SMX[c] 1 SS PO daily **(BIII)**, *or* • Dapsone[d] 50 mg PO daily plus (pyrimethamine[e] 50 mg plus leucovorin 25 mg) PO weekly **(BI),** *or* • (Dapsone[d] 200 mg plus pyrimethamine[e] 75 mg plus leucovorin 25 mg) PO weekly **(BI),** *or* • Atovaquone 1500 mg PO daily **(CIII),** *or* • (Atovaquone 1500 mg plus pyrimethamine[e] 25 mg plus leucovorin 10 mg) PO daily **(CIII)**

[a] Refer to the Drug-Drug Interactions section in the Adult and Adolescent Antiretroviral Guidelines for dosing recommendations.

[b] Screening tests for LTBI include tuberculin skin test or interferon-gamma release assays.

[c] TMP-SMX DS once daily also confers protection against toxoplasmosis and many respiratory bacterial infections; lower dose also likely confers protection.

[d] Patients should be tested for G6PD before administration of dapsone or primaquine. An alternative agent should be used in patients found to have G6PD deficiency.

[e] Refer to Daraprim Direct for information regarding how to access pyrimethamine.

For information regarding the evidence ratings, refer to the Rating System for Prevention and Treatment Recommendations in the Introduction section of the Adult and Adolescent Opportunistic Infection Guidelines.

Key to Acronyms: ART = antiretroviral therapy; BID = twice daily; CD4 = CD4 T lymphocyte cell; DS = double strength; EFV = efavirenz; G6PD = glucose-6-phosphate dehydrogenase; IgG = immunoglobulin G; IgM = immunoglobulin M; IM = intramuscular; INH = isoniazid; IV = intravenously; LTBI = latent tuberculosis infection; MAC = *Mycobacterium avium* complex; PCP = *Pneumocystis* pneumonia; PO = orally; RAL= raltegravir; SS = single strength; TB = tuberculosis; TMP-SMX = trimethoprim-sulfamethoxazole