Table 1. Chemoprophylaxis to Prevent First Episode of Opportunistic Disease

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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 with HIV section.

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 living 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.	
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.

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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 (AII) 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] plus INH 900 mg plus pyridoxine 50 mg) PO once weekly for 12 weeks (AII) Note: Rifapentine is recommended only for persons receiving EFV, RAL, or once daily DTG -based ARV regimen. Weight-Based Rifapentine Dose • *Weighing* 32.1–49.9 kg: 750 mg PO once weekly • *Weighing* >50 kg: 900 mg PO once weekly *or* (INH 300 mg plus rifampin 600 mg plus pyridoxine 25–50 mg) PO daily for 3 months (AI) See the Dosing Recommendations for Anti-TB Drugs table in the *Mycobacterium tuberculosis* Infection and Disease section for the list of ARV drugs not recommended to be used with rifampin and those which require dosage adjustment.	(INH 300 mg plus pyridoxine 25–50 mg) PO daily for 9 months (AII), *or* Rifampin 600 mg PO daily for 4 months (BI), *or* (Rifapentine [see dose below] plus INH 300 mg plus pyridoxine 25–50 mg) PO once daily for 4 weeks (AII) Weight-Based Rifapentine Dose • *Weighing* <35 kg: 300 mg PO once daily • *Weighing* 35–45 kg: 450 mg PO once daily • *Weighing* >45 kg: 600 mg PO once daily See the Dosing Recommendations for Anti-TB Drugs table in the *Mycobacterium tuberculosis* Infection and Disease section for the list of ARV drugs not recommended to be used with rifampin and those which require dosage adjustment. For persons exposed to drug-resistant TB, select anti-TB drugs after consultation with experts or public health authorities (AII).
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)

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Syphilis	Individuals exposed sexually within ≤90 days of the diagnosis of primary, secondary, or early latent syphilis in a sex partner, regardless of serologic status (AII), *or* Individuals exposed >90 days before syphilis diagnosis in a sex 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 one dose (AII)	For penicillin-allergic patients: • Doxycycline 100 mg PO twice daily for 14 days (BII), *or* • Ceftriaxone 1 g IM or IV daily for 10–14 days (BII)
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*

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			• 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 of 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 glucose-6-phosphate dehydrogenase (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 Guidelines for the Prevention and Treatment of Opportunistic Infections in Adults and Adolescents with HIV.

Key: ART = antiretroviral therapy; ARV = antiretroviral; BID = twice daily; CD4 = CD4 T lymphocyte cell; DS = double strength; DTG = dolutegravir; EFV = efavirenz; 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