

**PROPHYLAXIS TO PREVENT RECURRENCE OF OPPORTUNISTIC DISEASE (AFTER CHEMOTHERAPY FOR ACUTE DISEASE) IN INFANTS AND CHILDREN WITH HIV INFECTION**

		PREVENTIVE REGIMENS	
PATHOGEN	INDICATION	FIRST CHOICE	ALTERNATIVES
<b>Recommended for Life as Standard of Care</b>			
<i>Pneumocystis jirovecii</i> (PCP) (formerly known as <i>Pneumocystis carinii</i> )	Prior episode of <i>P. jirovecii</i> pneumonia (PCP)	TMP-SMX, 150/750mg/m <sup>2</sup> /day in 2 divided doses po t.i.w on consecutive days  Acceptable alternative schedules for same dosage: Single dose po t.i.w on consecutive days; 2 divided doses po q.d; 2 divided doses po; t.i.w on alternate days	Dapsone (children aged ≥1 month), 2mg/kg (max 100mg) po q.d or 4mg/kg (max 200mg) po q.w  Aerosolised pentamidine (children aged ≥5 years), 300mg q.m via Respirgard II™ nebuliser  Atovaquone (aged 1-3 months and >24 months, 30mg/kg po q.d; aged 4-24 months, 45mg/kg po q.d)
<i>T. gondii</i> <sup>1</sup>	Prior toxoplasmic encephalitis	Sulfadiazine, 85-120mg/kg/d in 2-4 divided doses po q.d plus pyrimethamine, 1mg/kg or 15mg/m <sup>2</sup> (max 25mg) po q.d plus leucovorin, 5mg po q3d	Clindamycin, 20-30mg/kg/d in 4 divided doses po q.d plus pyrimethamine, 1mg/kg po q.d plus leucovorin, 5mg po q3d
<i>Mycobacterium avium</i> Complex (MAC) <sup>2</sup>	Prior disease	Clarithromycin, 7.5mg/kg (max 500mg) po b.i.d plus EMB, 15mg/kg (max 900mg) po q.d; with or without rifabutin, 5mg/kg (max 300mg) po q.d	Azithromycin, 5mg/kg (max 250mg) po q.d plus EMB, 15mg/kg (max 900mg) po q.d; with or without rifabutin, 5mg/kg (max 300mg) po q.d
<i>C. neoformans</i>	Documented disease	Fluconazole, 3-6mg/kg po q.d	Amphotericin B, 0.5-1.0mg/kg IV q1-3w  Itraconazole, 2-5mg/kg po q12-24h
<i>H. capsulatum</i>	Documented disease	Itraconazole, 2-5mg/kg po q12-48h	Amphotericin B, 1.0mg/kg IV q.w
<i>Coccidioides immitis</i>	Documented disease	Fluconazole, 6mg/kg po q.d	Amphotericin B, 1.0mg/kg IV q.w; itraconazole, 2-5mg/kg po q12-48h
<i>Cytomegalovirus</i> (CMV)	Prior end-organ disease	Ganciclovir, 5mg/kg IV q.d; or foscarnet, 90-120mg/kg IV q.d	(For retinitis) Ganciclovir sustained-release implant q6-9m plus ganciclovir, 30mg/kg po t.i.d

PATHOGEN	INDICATION	PREVENTIVE REGIMENS	
		FIRST CHOICE	ALTERNATIVES
<i>Salmonella</i> Species (non- <i>typhi</i> ) <sup>3</sup>	Bacteraemia	TMP-SMX, 150/750mg/m <sup>2</sup> in 2 divided doses po q.d for several months	Antibiotic chemoprophylaxis with another active agent
<b>Recommended for Standard of Care Only if Subsequent Episodes Are Frequent or Severe</b>			
Invasive Bacterial Infections <sup>4</sup>	>2 infections in 1 year period	TMP-SMX 150/750mg/m <sup>2</sup> , in 2 divided doses po q.d; or IVIG, 400mg/kg q2-4w	Antibiotic chemoprophylaxis with another active agent
<i>Herpes simplex</i> Virus (HSV)	Frequent/severe recurrences	Acyclovir, 80mg/kg/day in 3-4 divided doses po q.d	
<i>Candida</i> (oropharyngeal)	Frequent/severe recurrences	Fluconazole, 3-6mg/kg po q.d	
<i>Candida</i> (oesophageal)	Frequent/severe recurrences	Fluconazole, 3-6mg/kg po q.d	Itraconazole solution, 5mg/kg po q.d

**NOTES:** The Respigard II™ nebuliser is manufactured by Marquest, Englewood, Colorado, USA.

<sup>1</sup>Only pyrimethamine plus sulfadiazine confers protection against PCP as well as toxoplasmosis. Although the clindamycin plus pyrimethamine regimen is recommended in adults, it has not been tested in children. However, these drugs are safe and are used for other infections.

<sup>2</sup>Significant drug interactions might occur between rifabutin and PIs and NNRTIs. Consult an expert.

<sup>3</sup>The drug should be determined by susceptibilities of the organism isolated. Alternatives to TMP-SMX include ampicillin, chloramphenicol, or ciprofloxacin. However, ciprofloxacin is not approved for use in persons aged less than 18 years; therefore, it should be used in children with caution and only if no alternatives exist.

<sup>4</sup>Antimicrobial prophylaxis should be chosen based on the microorganism and antibiotic sensitivities. TMP-SMX, if used, should be administered daily. Providers should be cautious about using antibiotics solely for this purpose because of the potential for development of drug-resistant microorganisms. IVIG might not provide additional benefit to children receiving daily TMP-SMX but may be considered for children who have recurrent bacterial infections despite TMP-SMX prophylaxis. Choice of antibiotic prophylaxis vs. IVIG should also involve consideration of adherence, ease of IV access, and cost. If IVIG is used, RSV IVIG (750mg/kg), not monoclonal RSV antibody, may be substituted for IVIG during the RSV season to provide broad anti-infective protection, if this product is available.

**CRITERIA FOR STARTING, DISCONTINUING, AND RESTARTING OI PROPHYLAXIS FOR ADULTS WITH HIV INFECTION\***

	<b>Criteria for Initiating Primary Prophylaxis</b>	<b>Criteria for Discontinuing Primary Prophylaxis</b>	<b>Criteria for Restarting Primary Prophylaxis</b>	<b>Criteria for Initiating Secondary Prophylaxis</b>	<b>Criteria for Discontinuing Secondary Prophylaxis</b>	<b>Criteria for Restarting Secondary Prophylaxis</b>
<b>Opportunistic Illness</b>						
PCP	CD4+ T cell count of <200 cells/mm <sup>3</sup> or oropharyngeal candidiasis	CD4+ T cell count if >200 cells/mm <sup>3</sup> for ≥3 months	CD4+ T cell count of <200 cells/mm <sup>3</sup>	Prior PCP	CD4+ T cell count of >200 cells/mm <sup>3</sup> for ≥3 months	CD4+ T cell count of <200 cells/mm <sup>3</sup>
Toxoplasmosis	IgG antibody to toxoplasma and CD4+ T cell count of <100 cells/mm <sup>3</sup>	CD4+ T cell count of >200 cells/mm <sup>3</sup> for ≥3 months	CD4+ T cell count of <100-200 cells/mm <sup>3</sup>	Prior toxoplasmic encephalitis	CD4+ T cell count of >200 cells/mm <sup>3</sup> sustained (e.g. ≥6 months) and Completed initial therapy and Asymptomatic for toxoplasmosis	CD4+ T cell count of <200 cells/mm <sup>3</sup>
Disseminated MAC	CD4+ T cell count of <50 cells/mm <sup>3</sup>	CD4+ T cell count of >100 cells/mm <sup>3</sup> for ≥3 months	CD4+ T cell count of <50-100 cells/mm <sup>3</sup>	Documented disseminated disease	CD4+ T cell count of >100 cells/mm <sup>3</sup> sustained (e.g. ≥6 months) and Completed 12 months of MAC therapy and Asymptomatic for MAC	CD4+ T cell count of <100 cells/mm <sup>3</sup>
Cryptococcosis	None	Not applicable	Not applicable	Documented disease	CD4+ T cell count of >100-200 cells/mm <sup>3</sup> sustained (e.g. ≥6 months) and Completed	CD4+ T cell count of <100-200 cells/mm <sup>3</sup>

					initial therapy and Asymptomatic for cryptococcosis	
Histoplasmosis	None	Not applicable	Not applicable	Documented disease	No criteria recommended for stopping	Not applicable
Coccidioidomycosis	None	Not applicable	Not applicable	Documented disease	No criteria recommended for stopping	Not applicable
CMV retinitis	None	Not applicable	Not applicable	Documented end-organ disease	CD4+ T cell count of >100-150 cells/mm <sup>3</sup> sustained (e.g. ≥6 months) and No evidence of active disease Regular ophthalmic examination	CD4+ T cell count of <100-150 cells/mm <sup>3</sup>