

## STAGE 1

Asymptomatic  
Persistent generalized lymphadenopathy

## STAGE 2

Unexplained moderate weight loss (<10% of presumed or measured body weight)<sup>1</sup>  
Recurrent respiratory tract infections (sinusitis, tonsillitis, otitis media, pharyngitis)  
Herpes zoster  
Angular cheilitis  
Recurrent oral ulceration  
Papular pruritic eruptions  
Seborrhoeic dermatitis  
Fungal nail infections

## STAGE 3

Unexplained<sup>2</sup> severe weight loss (>10% of presumed or measured body weight)  
Unexplained chronic diarrhoea for longer than one month  
Unexplained persistent fever (above 37.5°C intermittent or constant for longer than one month)  
Persistent oral candidiasis  
Oral hairy leukoplakia  
Pulmonary tuberculosis  
Severe bacterial infections (e.g. pneumonia, empyema, pyomyositis, bone or joint infection, meningitis, bacteraemia)  
Acute necrotizing ulcerative stomatitis, gingivitis or periodontitis  
Unexplained anaemia (<8 g/dl), neutropenia (<0.5 x 10<sup>9</sup>/L) and or chronic thrombocytopenia (<50 X 10<sup>9</sup>/L<sup>3</sup>)

## STAGE 4<sup>3</sup>

HIV wasting syndrome  
Pneumocystis pneumonia  
Recurrent severe bacterial pneumonia  
Chronic herpes simplex infection (orolabial, genital or anorectal of more than one month's duration or visceral at any site)  
Oesophageal candidiasis (or candidiasis of trachea, bronchi or lungs)  
Extrapulmonary tuberculosis  
Kaposi's sarcoma  
Cytomegalovirus infection (retinitis or infection of other organs)  
Central nervous system toxoplasmosis  
HIV encephalopathy  
Extrapulmonary cryptococcosis including meningitis  
Disseminated non-tuberculous mycobacteria infection  
Progressive multifocal leukoencephalopathy  
Chronic cryptosporidiosis  
Chronic isosporiasis  
Disseminated mycosis (extrapulmonary histoplasmosis, coccidiomycosis)  
Recurrent septicaemia (including non-typhoidal salmonella)  
Lymphoma (cerebral or B cell non-Hodgkin)  
Invasive cervical carcinoma  
Atypical disseminated leishmaniasis  
Symptomatic HIV associated nephropathy or Symptomatic HIV associated cardiomyopathy

<sup>1</sup>Assessment of body weight in pregnant woman needs to consider expected weight gain of pregnancy.

<sup>2</sup>Unexplained refers to where the condition is not explained by other conditions.

<sup>3</sup>Some additional specific conditions can also be included in regional classifications (e.g. reactivation of American trypanosomiasis (meningoencephalitis and/or myocarditis) in Americas region, Penicilliosis in Asia).

## Recommended schedule for starting and stopping OI prophylaxis

Opportunistic infection	Primary prophylaxis indicated when CD4 is	Drug of choice	Discontinue primary prophylaxis when CD4 is	Discontinue secondary prophylaxis when CD4 is
PCP	< 200	TMP-SMX 1 DS od		>200
Toxoplasmosis	< 100	TMP-SMX 1 DS od		>200
CMV retinitis	Not indicated	Secondary: Oral ganciclovir	Not applicable	>100
Cryptococcus meningitis	Not indicated	Secondary: Fluconazole	Not applicable	>100
Oral and oesophageal candidiasis	Not indicated	Not applicable	Not applicable	Not applicable

Note:

- Start co-trimoxazole when CD4 count is less than 200 or WHO Clinical Stage 3 or 4, irrespective of CD4. This includes all HIV-TB co-infected patients.
- Discontinue when two consecutive CD4 counts are more than the respective levels, the patient is on ART more than 6 months and adherence is good.
- Reintroduce prophylaxis if CD4 count falls below 200 again.

## Initiation of ART based on WHO Clinical Staging and CD4 count

Classification of HIV-associated clinical disease	WHO clinical stage	CD4 test not available immediately (or pending)	CD4 test available
Asymptomatic	1	Do not treat	Treat if CD4<200
Mild symptoms	2	Do not treat	
Advanced symptoms	3	Treat	Consider treatment if CD4<350 and initiate ART before CD4 cell count drops below 200
Severe/advanced symptoms	4	Treat	Treat irrespective of CD4

Note:

- Determining the clinical stage is part of the baseline assessment (first visit) on entry into the care and treatment programme. Clinical staging is used to guide decisions on initiating co-trimoxazole prophylaxis and ART when CD4 testing facilities are not immediately available (or the result is pending).
- Offer ART to symptomatic patients if the CD4 testing facilities are not immediately available (or the result is pending).
- Consider ART for asymptomatic patients with CD4 count between 200-350 cells/mm<sup>3</sup>.
- If the CD4 count is 200-250 cells/mm<sup>3</sup>, physicians can consider repeating the CD4 test in 4 weeks in asymptomatic patients. This is to rule out the possibility of a 20% margin of error in laboratory results.
- Patients should start ART before the CD4 count drops below 200 cells/mm<sup>3</sup>.

## Clinical Staging events to guide decision-making on switching

New or Recurrent Event on ART <sup>a</sup>	Recommendations	Additional Management Options
Asymptomatic (T1)	Do not switch regimen	<ul style="list-style-type: none"> <li>Maintain scheduled follow-up visits, including CD4 monitoring (if available)</li> <li>Continue to offer adherence support</li> </ul>
Stage 2 event (T2)	Do not switch regimen <sup>b</sup>	<ul style="list-style-type: none"> <li>Treat and manage staging event</li> <li>Assess and offer adherence support</li> <li>Check if on treatment for at least six months</li> <li>Assess continuation or reintroduction of OI prophylaxis</li> <li>Schedule earlier visit for clinical review and Consider CD4 (if available)<sup>c</sup></li> </ul>
Stage 3 event (T3)	Consider switching regimen <sup>d</sup>	<ul style="list-style-type: none"> <li>Treat and manage staging event and monitor response</li> <li>Assess and offer adherence support</li> <li>Check if on treatment for at least six months</li> <li>Check CD4 cell count (if available)<sup>e</sup></li> <li>Assess continuation or reintroduction of OI prophylaxis</li> <li>Institute more frequent follow-up</li> </ul>
Stage 4 event (T4)	Switch regimen <sup>b,e</sup>	<ul style="list-style-type: none"> <li>Treat and manage staging event and monitor response</li> <li>Check if on treatment for at least six months</li> <li>Assess continuation or reintroduction of OI prophylaxis</li> <li>Check CD4 cell count (if available)<sup>e</sup></li> <li>Assess and offer adherence support</li> </ul>

a Refers to clinical stages while on ART for at least six months (termed T1, T2, T3, T4).

b Differentiation of opportunistic infections from immune reconstitution inflammatory syndrome is necessary.

c Treat and manage the staging event before measuring CD4 cell count.

d Certain WHO clinical stage 3 conditions (e.g. pulmonary TB, severe bacterial infections) may be indicators of treatment failure and thus require consideration of second-line therapy; response to appropriate therapy should be used to evaluate the need for switching of therapy.

e Some WHO clinical stage 4 conditions (lymph node TB, uncomplicated TB pleural disease, oesophageal candidiasis, recurrent bacterial pneumonia) may not be indicators of treatment failure and thus do not require consideration of second-line therapy; response to appropriate antimicrobial therapy should be used to evaluate the need to switch therapy.