Figure 11.4 Advanced HIV ART management diagram

Management of patients with advanced HIV\(^1\), total ART >6 months\(^2\), NO new stage 4 illness

If WHO criteria are already met for treatment failure switch to 2nd line ART immediately.\(^{1b}\)  
(see Chapter 6, Table 6.1)

First line ART currently, or at the time of treatment interruption.  
(The decision regarding whether to switch to a new regimen is based on CD4, viral load (VL) and the ART history regarding treatment interruptions\(^{1a,b,3}\)

Currently interrupting treatment for >1 month

Currently on treatment or interrupting for <1 month

Urgent CD4 only\(^{4,5b}\)

Request CD4 and VL if not done within past 3 months

Fast track result\(^ {5a}\)

CD4 >100\(^ {4c}\)  
CD4 <100\(^ {4a}\)

CD4 <100 and VL >1,000  
(OR VL result not available within 4 weeks)\(^{4a,b}\)

Any CD4 and VL <1,000

CD4 >100 and VL >1,000

• Restart 1st line ART  
• VL in 3 months\(^8\)

• Switch to 2nd line\(^6\)  
ART\(^7,8\) (refer urgently if authorisation needed\(^{6b}\))  
• VL 3 months after last VL

Continue 1st line:  
Routine follow-up

Follow-up by experienced clinician \(^{see\,1b}\)

Assess for new stage 4 disease\(^{1b}\) at each visit

Next VL 3 months after last VL\(^5\)

Subsequent decisions follow standard management guidelines\(^{1a,b}\)

Continued 3 months after last VL

Continued 3 months after last VL
1. Patients presenting with advanced disease are at high risk of mortality and morbidity.
   a. A decision may need to be made to switch to second line ART outside standard guidelines. This will be guided by:
      • Whether the patient is currently on ART or has interrupted (see also note 3);
      • CD4 <100 indicates high risk of developing a fatal OI; requires an urgent decision;
      • The timeous availability of VL for confirming treatment failure.
   b. If there is already a clear basis for diagnosing treatment failure (Chapter 6, sections 3–5) according to WHO criteria (virological, clinical or immunological) the ART regimen must be switched immediately. Note that a new stage 4 disease qualifies for clinical failure.

2. The total time on ART. The longer one is on an NNRTI-based regimen, the greater the opportunity for errors leading to the development of resistance. Conversely, it is very unlikely that resistance will develop in less than 6 months of total ART exposure.

3. ART-naïve or prior ART. As it is being increasingly noted that patients presenting with advanced disease have been on ART previously, it is important to take a careful ART history, going back many years, to establish the criteria noted in point 2 above.

4. The urgency with which the decision to switch needs to be taken is affected by the CD4.
   a. CD4 is <100: the risk of developing a fatal OI in the next few months is high. Delaying for 3 months for adherence sessions and follow-up viral load may prove fatal. A rapid empirical switch may be indicated.
   b. If CD4 <100 and there is a delay of >4 weeks in getting VL result (including not having VL at all), a fatal OI may develop while waiting. Therefore switch empirically.
   c. CD4 >100: More time is available for a re-trial of first line medication to determine if there is resistance. If minimal change at follow-up VL at 3 months, switch to a new regimen. If significant change, defer switch for one month and repeat VL. (If the laboratory gives a log value, consider a log drop >2 to be significant.)

5. Sequential viral load results are important in the decision regarding a switch to a new regimen.
   a. Viral load tests should therefore be prioritised and the results fast-tracked.
   b. If the patient has currently interrupted treatment for >1 month the viral load will already be elevated, so it is not useful to do it.

6. A rapid switch outside standard guidelines may save lives:
   a. In the hands of more experienced clinicians, this is merely a guide for management decisions in patients presenting with advanced disease so clinical judgment must be applied.
   b. If there is insufficient experience or authority to make this decision, more experienced help must be sought the same day.

7. When to start ART or switch to 2nd line:
   • If TB and cryptococcal disease are excluded, offer same day initiation.
   • If serum CrAg positive + patient asymptomatic + LP not possible or LP has been done and CSF CrAg is negative, start ART the same day.
   • If non-CNS TB, once TB treatment has been initiated, start ART as soon as possible within 1–2 weeks.
   • If neurological TB or cryptococcal meningitis, delay ART till 4 weeks after OI treatment started.

8. PS (patient support) intervention recommended: both for suspected treatment failure and if starting a new regimen.