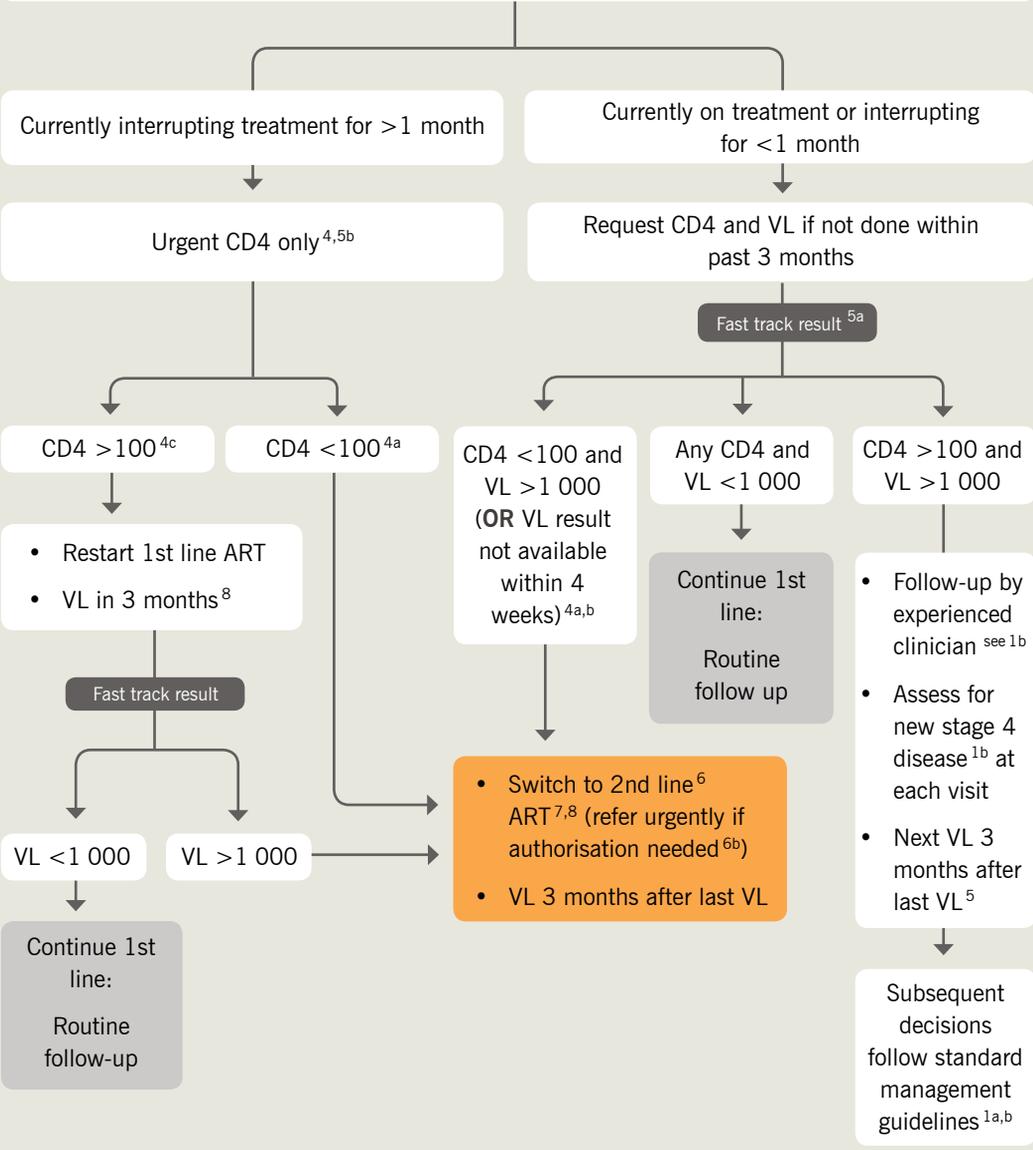


### Figure 11.4 Advanced HIV ART management diagram

Management of patients with advanced HIV<sup>1</sup>, total ART >6 months<sup>2</sup>, NO new stage 4 illness

If WHO criteria are already met for treatment failure switch to 2nd line ART immediately.<sup>1b</sup>  
(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<sup>1a,b,3</sup>)



**Notes for Figure 11.4**

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 2<sup>nd</sup> 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.