**Figure 11.2 Clinical approach to patients with advanced disease**

**Advanced HIV: CD4 <200 or new WHO stage 3 or 4**

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### Clinical approach to patients: all patients

**If there are any danger signs, refer to hospital immediately:**

- Respiratory rate >30
- Heart rate >120
- Systolic BP <90
- Temperature >39°C
- Moderate/severe dehydration
- Unable to walk unaided
- Saturation <90%

**While organising referral:**

- Point of care investigations
- Urgent management, (e.g. IV fluids, oxygen)
- Start urgent treatment: (e.g. pneumocystis treatment, antibiotics, TB treatment). If delay in referral, see Figure 11.6.

**If NO danger signs: History and examination looking for ART status, OIs and co-morbidities:**

#### TB assessment

- Patients with advanced HIV are at high risk for TB.
- Disseminated TB frequently does not present with respiratory symptoms.
- **Past history:** Any previous TB?
- **Currently history:** On treatment now? Not improving on treatment?
- **Symptom screening today:** Loss of weight, fever, night sweats, cough?
- **Examination:** Pleural effusion, nodes, tender or distended abdomen, ascites, hepatomegaly?

#### History and examination

**ART history:**

- Which regimens and when?
- Previous CD4 and VLs: Is treatment failure suspected?
- **Co-morbidities:** Diabetes, hypertension, epilepsy, kidney or liver disease.
- **Hospitalised recently:** Within past 3 months? Include reason.
- **Neurological conditions:** All are danger signs – refer.
- **Respiratory conditions:** If danger signs – refer.
- **Kaposi’s sarcoma:** Palate, skin.
- **CMV retinopathy** in high risk areas.
- **Chronic diarrhoea.**
- **Assess for dehydration.**

#### Investigations for ALL patients

- **CD4:**
  - <200: do serum CrAg.
  - <100: do TB LAM.
  - 100–200: do TB LAM if TB symptoms.
  - Collect sputum if productive cough.
  - **Haemoglobin.**
  - **Urine dipstick:** If proteinuria, do serum creatinine.
  - Routine viral load if not done within past 6 months.
  - Targeted viral load if not done within past 3 months, or if stage 4 condition, or last VL >1 000.
  - **Malaria rapid test** if endemic.
  - **Hepatitis B** if available and not yet done.

**Management is now based on two key criteria:**

1. Is the patient clinically STABLE or UNSTABLE?
2. Is the patient ART-naïve (or on ART for <6 months) or on ART >6 months?

**Communication with hospital:**

- Patients, apart from those with danger signs, may need referral – if appropriate investigation or management is not available at primary care, or if rapid decision-making for regimen switch for treatment failure is necessary at referral level.
- Establish a ‘hotline’ with hospital clinicians for clinical advice, case discussion, referral and back-referral – particularly when transfer is difficult.