**BASELINE CLINICAL INVESTIGATIONS**

- Recognise the client with respiratory, neurological, or abdominal danger signs
- Nutritional assessment (including weight and height)
- Screen for TB. If no symptoms consider TPT
- Meningitis
  - Mental health issues/substance abuse
- Other acute illness e.g. PJP or bacterial pneumonia

**BASELINE LABORATORY EVALUATION**

**INTERSECTION / ACTION**

- Confirm HIV test result to confirm HIV status for those without documented HIV status
- CD4 count (cells/μL) to identify eligibility for CPT and CoS screening
- CPT if CD4 < 200 or WHO stage 3, 4 or 5
- If CPT < 300 a reflex CArt screening will be done automatically
- CArt-negative: no further renal therapy required. Start ART
- CArt-positive: the client will require treatment of the infection. All clients, including pregnant women, should be referred for a LPV. Deferral as above

**TEST AND PURPOSE**

- CPT if CD4 < 200 or WHO stage 3, 4 or 5
- If CPT < 300 a reflex CArt screening will be done automatically
- CArt-negative: no further renal therapy required. Start ART
- CArt-positive: the client will require treatment of the infection. All clients, including pregnant women, should be referred for a LPV. Deferral as above

**Cervical cancer screening**

At baseline and thereon every three years if normal. If lesions present, refer for colposcopy and manage accordingly

**HSAG**

Identify hepatitis B co-infection

**EGFR**

To detect renal insufficiency, and eligibility for TDF

**Haemoglobin (HB)**

To detect anaemia

**HbA1c and eGFR**

To exclude treatment-related kidney disease

**eGFR**

Use estimated glomerular filtration rate (eGFR) as a measure of kidney function. This is derived from age, sex, race, body weight and serum creatinine levels. It is expressed in mL/minute per 1.73 m². eGFR is a better measure of kidney function than serum creatinine, which is a less sensitive indicator of kidney damage. eGFR is calculated using the Chronic Kidney Disease Epidemiology Collaboration (CKD-EPI) equation:

\[
eGFR = \frac{141 \times \text{CREAT}}{\text{Age} \times (0.857 \text{ if female}) \times (1.159 \text{ if African})} \times \left( \frac{1.21 \text{ if Asian}}{0.992} \right) \times \left( \frac{0.85 \text{ if > 70 years}}{1.00} \right)
\]

where CREAT is serum creatinine concentration (umol/L). eGFR can be used to determine the dose of antiretroviral drugs that are renally eliminated.

**Adults and adolescents**

- Provide information on risks and benefits of TDF and TDF to allow client to make an informed choice. Document that woman has been counselled and consents to receive DTG

**GeneXpert**

To diagnose TB

**Fail-safe and CD4 testing**

- Adult women and adolescent girls ≥ 35 kg and ≥ 10 years of age
- Provide information on risks and benefits of TDF and TDF to allow client to make an informed choice. Document that woman has been counselled and consents to receive DTG

**Adolescent and adult boys ≥ 35 kg and ≥ 10 years of age**

- Confirm HIV test result
- Confirm TB status
- Conduct CD4 count
- Conduct TB screening
- Conduct anti-retroviral therapy (ART) eligibility and determine the timeframe for ART initiation

**CLINICAL ASSESSMENT AND RESPONSE TO ART**

**TEST**

- CD4 count is performed at ART
- Reactive or positive should be on a TDF nucleoside reverse transcriptase inhibitor; drug interactions contact the National HIV Treatment Algorithm team.
- Drug interactions with rifampicin, metformin, some anticonvulsants and polycyclic aromatic hydrocarbons (PAHs) e.g. benzene, toluene, xylene.
- Neuropsychiatric side effects
- Drug interactions with hormonal contraceptives and with oral anticoagulants. It is recommended that the client is on a stable contraceptive regimen.
- Unintended pregnancy
- Too much DTG can be fatal
- DTG can increase the risk of neural tube defects (NTDs) if used in the first six weeks of pregnancy

**DO THE FOLLOWING TESTS IF THE CLIENT IS ON THE DRUG THAT MAY CAUSE THE ADVERSE EFFECT**

- Drug interactions contact the National HIV Treatment Algorithm team.
- Drug interactions with rifampicin, metformin, some anticonvulsants and polycyclic aromatic hydrocarbons (PAHs) e.g. benzene, toluene, xylene.
- Neuropsychiatric side effects
- Drug interactions with hormonal contraceptives and with oral anticoagulants. It is recommended that the client is on a stable contraceptive regimen.
- Unintended pregnancy
- Too much DTG can be fatal
- DTG can increase the risk of neural tube defects (NTDs) if used in the first six weeks of pregnancy