Ministry of Health

LABORATORY PARAMETERS FOR MONITORING INFANTS AND CHILDREN

Laboratory tests for diagnosis and monitoring	Baseline (at entry into care)	At initiation of first- or second-line ART regimen	Every 6 months	As required or symptom directed
HIV diagnostic testing : virological and Ab testing	✓			
Haemoglobin [a]		✓		✓
FBC	✓	✓ [b]		
%CD4+ or absolute CD4 cell count [c]	✓	✓	✓	✓
Pregnancy testing in adolescent girls [de]		✓		✓
Full chemistry (including, but not restricted to, liver enzymes, renal function, glucose, lipids, amylase, lipase and serum electrolytes) [f]		✓	✓ [f]	✓
HIV VL measurement [gh]				✓
OI screening (where possible)	✓	✓	✓	✓

a. Haemoglobin monitoring at week 4 and 12 after initiation of ART is recommended if AZT is used.
b. FBC can be repeated at initiation of ART if last FBC was done at least 3 months prior
c. HIV-infected children not yet eligible for ART should be monitored with CD4 count every six months. For infants and children who develop new or recurrent WHO stage 2 or 3 events, or whose CD4 count approaches threshold values, the frequency of CD4 measurement can be increased.%CD4+ is preferred in children <5 years of age.
d. Pregnancy testing may be needed for adolescent girls prior to initiating a regimen containing EFV.
e. For pregnant adolescent girls, provide prophylaxis or combination ART to those who are in need of it for their own health and/or to prevent vertical transmission. (See PMTCT Guidelines, 2010) [102]
f. Routine monitoring (every six months) of full chemistry, particularly lipid levels, liver enzymes and renal function, should be considered for infants and children on second-line drugs and LFTs for those on NVP.
g. At present, VL measurement is not a prerequisite for initiation or regular monitoring of ART in resource-limited settings. VL can be used to diagnose HIV infection, and to confirm clinical or immunological failure prior to switching treatment regimen.
h. If possible VL should be assessed in infants on NNRTI-based regimens who are known to have been exposed to NNRTIs intrapartum or through breastfeeding every 6 months.