ART Workup & Monitoring

Baseline tests, interaction pitfalls & response review

CLINICAL PATHWAY

Check drug interactions before adding or changing anything — PPIs, antacids and some antibiotics commonly clash with ART. Viral load should fall fast and stay undetectable; flag anything off this track to the specialist early rather than waiting for the next scheduled review.

BASELINE WORKUP — BEFORE FIRST DOSE

- Viral status: HIV RNA viral load, CD4 count, resistance genotype
- Co-infections: hepatitis B and C serology, syphilis serology, STI screen
- Organ function: renal function (eGFR), liver function, fasting lipids and glucose
- Other baseline: full blood count, pregnancy test where relevant, vaccination status review (hepatitis A/B, pneumococcal, influenza)

KEY DRUG-INTERACTION PITFALLS

- Rifampicin + integrase inhibitor: induces metabolism — needs specialist-guided dose adjustment, don't co-prescribe without review
- Proton pump inhibitors + rilpivirine: contraindicated — PPIs reduce rilpivirine absorption substantially
- St John's Wort: avoid with most ART — reduces drug levels via enzyme induction, risking virological failure
- Antacids/calcium/iron + integrase inhibitors: separate dosing by several hours — co-ingestion reduces absorption

TREATMENT RESPONSE — WHAT TO EXPECT

Viral load should fall fast and keep falling.

4wk	**~1 month:** viral load should have fallen substantially from baseline; if not, flag to the specialist — check adherence first
12-16wk	**~3–4 months:** viral load typically undetectable; if still detectable, urgent specialist review for adherence or resistance
24-48wk	**6–12 months:** sustained undetectable viral load; CD4 count recovering; routine specialist-led monitoring continues
Stable	**Long-term:** undetectable viral load maintained on routine monitoring; U=U applies once undetectable for 6 months

INTERACTIONS & U=U THRESHOLD

Check the Liverpool HIV Drug Interactions tool (hiv-druginteractions.org) before adding any new medicine. U=U (undetectable = untransmittable) applies once viral load has been undetectable for at least 6 months on stable therapy. ASHM helpline 1800 022 226 for clinician support.

■ SAFETY

- Check the Liverpool interactions tool before adding or changing any medicine in a patient on ART — PPIs, antacids and some antibiotics commonly clash
- Don't co-prescribe rifampicin with an integrase inhibitor without specialist-guided dose adjustment
- Confirm hepatitis B status before stopping any TDF/TAF/3TC-containing regimen — abrupt cessation can flare HBV

■ RED FLAGS / REFER

- Viral load not falling as expected at the 1-month or 3–4-month checkpoints → urgent specialist review
- Suspected virological failure or significant side-effects on an existing regimen → specialist review
- Any new medicine with a possible interaction flagged by the Liverpool tool → check with the specialist before prescribing