HIV — Routine Monitoring & Investigations

CD4 & viral load monitoring frequency, plus core bloods

CLINICAL PATHWAY

Most people with HIV who are stable on suppressive ART need less frequent specialised monitoring than in the past. Every visit should still include BP, weight/waist circumference, an adherence and side-effect check, mental health screening and an STI risk discussion — the structured CD4/viral load schedule below sits on top of this routine review.

CD4 & VIRAL LOAD MONITORING

- **Newly starting ART:** viral load every 4–8 weeks until suppressed; CD4 at baseline and again at 3 months.
- **First 2 years of suppressive ART:** CD4 every 3–4 months if CD4 <300, or every 6 months if CD4 ≥300. Viral load every 3–4 months.
- **After 2 years, suppressed:** CD4 every 6 months if still <300, every 12 months if 300–500, and optional once consistently >500. Viral load can extend to 6-monthly if adherent and stable for over a year.
- **Viral load not suppressed:** CD4 every 3–6 months until resuppression is achieved.

VIRAL LOAD THRESHOLDS

Suppressed/undetectable is below the laboratory's detection limit — commonly <20–50 copies/mL depending on the assay. A result >200 copies/mL is more likely to reflect a true rise; repeat in 2–4 weeks (no later than 8) before acting — a single missed dose can cause a transient blip. >500 copies/mL carries a higher risk of genuine virologic failure with resistance.

OTHER ROUTINE INVESTIGATIONS

- **Renal function & urinalysis:** baseline, 3 and 6 months after starting tenofovir disoproxil (TDF), then 6-monthly while on TDF; annually on lower-risk regimens.
- **LFTs & fasting lipids:** baseline and 3 months after starting or changing ART, then annually once stable.
- **STI screening:** annually at minimum, 3-monthly if MSM or on PrEP — see companion sheet ID-03 for full detail.
- **Annual review bloods:** FBC, EUC, LFTs, fasting lipids, glucose/HbA1c and a cardiovascular risk score, alongside the HIV-specific tests above.

IF VIRAL LOAD BECOMES DETECTABLE

On two consecutive detectable results, investigate before changing therapy — do not adjust ART in primary care. Confirm with a repeat viral load in 4 weeks and review adherence honestly; check for new drug interactions or absorption issues (recent antibiotics, antacids, OTC supplements, St John's Wort); then arrange HIV resistance genotype testing and refer back to the HIV physician for regimen review.

■ SAFETY

- Don't change ART in primary care for a single detectable result — confirm with a repeat test in 4 weeks first.
- A transient blip (an isolated low-level detectable result that resuppresses) is common and not usually a sign of treatment failure.
- Virologic failure is generally defined as a confirmed viral load ≥200 copies/mL on treatment — this needs resistance testing, not a same-day regimen change.

■ RED FLAGS / REFER

- Confirmed (two consecutive) detectable viral load.
- CD4 falling on trend, or a new value <200.
- New HIV-related symptoms, or any suspected opportunistic infection.
- Pregnancy — confirmed or planned.

Companion sheet: ID-06B (Prevention, comorbidities & referral). See also ID-01/02 (diagnosis & ART), ID-03 (STI screening) and ID-04 (OI prophylaxis). Verify against ASHM hiv.guidelines.org.au and current local pathology reference ranges before applying monitoring frequencies.