HIV — Prophylaxis, TB & Vaccination

Primary prophylaxis, TB co-infection & vaccination

CLINICAL PATHWAY

Primary prophylaxis bridges the gap until ART restores CD4. Always test for HIV when TB is diagnosed — HIV is the strongest risk factor for active TB — and review vaccination status at every visit, since several common vaccines need adjusting for HIV and CD4 count.

PRIMARY PROPHYLAXIS — WHAT & WHEN

- PCP: CD4 <200 — co-trimoxazole DS 1 tab daily. Also covers toxoplasma if CD4 <100 with positive toxo IgG.
- MAC: CD4 <50 — azithromycin 1200mg weekly, after excluding active MAC infection.
- Cryptococcus: where CrAg screening isn't available and CD4 <100–200 — fluconazole 200mg daily; CrAg screening is preferred where accessible. Specialist-guided.
- Latent TB: positive IGRA/TST with active TB excluded — isoniazid 9 months plus pyridoxine (B6).

STOPPING PROPHYLAXIS

Stop PCP/toxoplasma prophylaxis once CD4 is sustained above 200 for 3 months on ART; stop MAC prophylaxis once CD4 is sustained above 100 for 3 months. Restart if CD4 falls back below threshold.

TB & HIV CO-INFECTION

Test HIV in everyone diagnosed with TB. Start TB treatment first; add ART within 2 weeks if CD4 <50, or within 2–8 weeks if CD4 ≥50. **TB meningitis is an exception** — delay ART by 4–8 weeks given the higher risk of IRIS in CNS disease. Rifampicin reduces INSTI levels: use dolutegravir 50mg twice daily; avoid rilpivirine and boosted protease inhibitors with rifampicin.

VACCINATION — KEY RULES

- Influenza: annual, inactivated only — the live nasal vaccine is contraindicated.
- Pneumococcal: at diagnosis, with boosters per the ATAGI Handbook — higher risk of invasive disease.
- Hepatitis B: full series if non-immune; consider higher-dose/extra doses if CD4 <200.
- HPV (Gardasil 9): recommended for all people with HIV regardless of age or sex.
- MMR/VZV: only if CD4 >200 — live vaccines are contraindicated at lower counts.

■ SAFETY

- Sulfonamide allergy: consider desensitisation or an alternative (e.g. dapsone, atovaquone) for PCP prophylaxis — don't omit prophylaxis outright.
- Don't give live vaccines (MMR, VZV, live nasal influenza) if CD4 is low — check current count first.

■ RED FLAGS / REFER

- Any suspected opportunistic infection in a person with HIV and low CD4 — refer same day.
- New neurological signs, or visual changes (floaters/vision loss) — same-day referral.
- Severe or subacute dyspnoea with desaturation — same-day referral to exclude PCP.

Companion sheet: ID-04A (CD4 thresholds & OI recognition). See also ID-01/02 (diagnosis & ART) and ID-03 (STI screening).
Verify against ASHM/hiv.guidelines.org.au, the CDC/NIH Adult OI Guidelines and the ATAGI Immunisation Handbook.