

Summary of antiretrovirals and adverse effects

Nucleoside/nucleotide reverse transcriptase inhibitors

NRTI	Recommended dose	Common or severe ADR
TDF	• 300 mg daily	• Renal failure, tubular wasting syndrome, reduced bone mineral density, nausea
3TC	• 150 mg 12-hourly or 300 mg daily	• Anaemia (pure red cell aplasia) (rare)
FTC	• 200 mg daily	• Anemia (pure red cell aplasia) (rare), palmar hyperpigmentation
ABC	• 300 mg 12-hourly or 600 mg daily	• Hypersensitivity reaction
AZT	• 300 mg 12-hourly	• Anaemia, neutropenia, GI upset, headache, steatohepatitis (medium potential), lipoatrophy

Non-nucleoside reverse transcriptase inhibitors

NNRTI	Recommended dose	Common or severe ADR
EFV	• 600 mg or 400 mg <i>nocte</i>	• CNS symptoms (vivid dreams, problems with concentration, dizziness, confusion, mood disturbance, psychosis, late onset encephalopathy), rash, hepatitis, gynaecomastia
NVP	• 200 mg daily for 14 days then 200 mg 12-hourly	• Rash, hepatitis
RPV	• 25 mg daily with food	• Rash, hepatitis, CNS symptoms (all uncommon)
ETR	• 200 mg 12-hourly	• Rash, hepatitis (both uncommon)

Protease inhibitors

PI	Recommended dose	Common or severe ADR
ATV/r	• 300 mg/100 mg daily; if given with EFV ATV/r 400 mg/100 mg daily	• Unconjugated hyperbilirubinaemia (visible jaundice in a minority of patients), dyslipidemia (low potential), renal stones (rare) and hepatitis (uncommon)
LPV/r	• 400 mg/100 mg 12-hourly or 800 mg/200 mg daily (only if PI-naïve)	• GI upset, dyslipidemia and hepatitis
DRV/r	• 600 mg/100 mg 12-hourly • 800 mg/100 mg daily (only if no DRV mutations) • Consider 400 mg/100 mg daily (only if no DRV mutations)	• GI upset, rash, dyslipidemia, hepatitis (uncommon). Contains sulphonamide moiety (use with caution in patients with sulpha allergy)

Integrase strand transfer inhibitors

InSTI	Recommended dose	Common or severe ADR
RAL	• 400 mg 12-hourly	• Headache and other CNS side-effects, GI upset, hepatitis and rash (rare), rhabdomyolysis (rare), weight gain
DTG	• 50 mg daily	• Insomnia, headache and other CNS side-effects, GI upset, hepatitis and rash (rare). possibly teratogenic, weight gain

- Package inserts of all ARVs and concomitant drugs
- [University of Liverpool HIV Drug Interactions Checker](#)
- [Aid for AIDS clinical guidelines](#) contain tables giving advice on drug-drug interactions
- [University of Cape Town Medicines Information Centre \(MIC\)](#) has a regularly updated table of interactions between ARTs and drugs used in the public sector (essentials medicines list)
- MIC HIV & TB Hotline: 0800 212 506 or 021 406 6782

3TC, lamivudine; ABC, abacavir; ADR, adverse drug reaction; ATV/r, ritonavir-boosted atazanavir; AZT, zidovudine; CNS, central nervous system; DRV/r, ritonavir-boosted darunavir; DTG, dolutegravir; EFV, efavirenz; ETR, etravirine; FTC, emtricitabine; GI, gastrointestinal; InSTI, integrase strand transfer inhibitor; LPV/r, ritonavir-boosted lopinavir; MIC, Medicines Information Centre; NVP, nevirapine; NNRTI, non-nucleoside reverse transcriptase inhibitor; NRTI, nucleoside/nucleotide reverse transcriptase inhibitor; PI, protease inhibitor; RAL, raltegravir; RPV, rilpivirine; TDF, tenofovir disoproxil fumarate.