Protease inhibitor-based second-line regimens

- Choice of boosted PI in second-line ART:
  - DRV/r (800 mg/100 mg) > ATV/r (300 mg/100 mg) > LPV/r (400 mg/100 mg).
  - DRV/r and ATV/r cannot be given with RIF; instead use double-dose LPV/r, or switch to DTG if possible, or use RFB instead of RIF.

Switching patients on PI-based second-line regimens to a DTG-based regimen: Guided by VL

First- and second-line regimen: Prior ART exposure	Second-line options
First-line TDF + 3TC (or FTC) + NNRTI and second-line AZT + 3TC + PI/r	• Can continue the same regimen or switch to AZT + 3TC + DTG
First-line AZT (or d4T) + 3TC + NNRTI and second-line TDF + FTC + PI/r	• Preferably stay on the same regimen • If resistance testing was performed at first-line failure and showed full susceptibility to TDF, then it is possible to switch to TDF + 3TC (or FTC) + DTG • If no resistance test was performed, but there is intolerance to all boosted PIs, then consider switching to TDF + 3TC (or FTC) + DTG with close virological monitoring (3-monthly) for the first year.

VL > 50 copies/mL:
- Switching to a DTG-based regimen is not advised
- Provide adherence counselling, and consider switching if the VL is suppressed
- If the VL is still elevated, then a resistance test for third-line regimens may be indicated.

3TC, lamivudine; ART, antiretroviral therapy; ATV/r, ritonavir-boosted atazanvir; AZT, zidovudine; d4T, stavudine; DRV/r, ritonavir-boosted darunavir; DTG, dolutegravir; FTC, emtricitabine; LPV/r, ritonavir-boosted lopinavir; NNRTI, non-nucleoside reverse transcriptase inhibitor; PI, protease inhibitor; PI/r, ritonavir-boosted protease inhibitor; RIF, rifampicin; RFB, rifabutin; TDF, tenofovir disoproxil fumarate; VL, viral load.