

Resistance tests

- Resistance testing should not be performed in a patient with a low or undetectable VL. Resistance testing is generally only possible if VL > 500 copies/mL.
- Resistance testing should be performed when a patient is on an ART regimen or up to 4 weeks after discontinuation.

Regimen	DTG-based therapy	NNRTI-based therapy	PI-based therapy
First-line regimen	Recommended if patient on regimen for > 2 years [†]	Not routinely recommended	Not routinely recommended
Second-line regimen	Recommended if patient on regimen for > 2 years [‡]	Recommended	Recommended if patient on regimen for > 2 years [†]

[†], Unless indicated earlier (e.g. accidental exposure to sub-therapeutic drug levels as a result of drug-drug interactions; infected while on PrEP for DTG-based therapies; DTG monotherapy)

[‡], Unless indicated earlier (patient previously developed resistance to other INSTIs; ART regimen may not contain any fully active NRTIs; accidental exposure to sub-therapeutic levels of DTG).

ART, antiretroviral therapy; DTG, dolutegravir; INSTI, integrase strand transfer inhibitor; NNRTI, non-nucleoside reverse transcriptase inhibitor; NRTI, nucleoside/nucleotide reverse transcriptase inhibitor; PI, protease inhibitor; PrEP, pre-exposure prophylaxis; VL, viral load.