PatientID: HIVDR-771-23

Sebuttemba 27, 2023

## Color Code

HR: High-Level Resistance
LR: Low-Level Resistance
IR: Intermediate Resistance

S: Susceptible

DRUG.CLASS	DRUG	RESISTANCE.PROFILE	DRMS.above.20.percent.prevalence
PI	ATV	S	
	DRV	$\mathbf{S}$	
	FPV	$\mathbf{S}$	
	IDV	$\mathbf{S}$	
	LPV	${f S}$	
	NFV	$\mathbf{S}$	
	SQV	$\mathbf{S}$	
	TPV	$\mathbf{S}$	
	ABC	IR	
	AZT	$^{ m HR}$	
	D4T	IR	
NRTI	DDI	$_{ m HR}$	L74I;M184V;L210W;T215Y
	FTC	$_{ m HR}$	
	LMV	$_{ m HR}$	
	TDF	$_{ m LR}$	
NNRTI	DOR	$_{ m LR}$	
	EFV	$_{ m HR}$	
	ETR	$_{ m HR}$	K101P;E138K;V179L;K103NS
	NVP	$_{ m HR}$	
	RPV	$_{ m HR}$	
INSTI	BIC	$_{ m HR}$	
	CAB	$_{ m HR}$	
	DTG	$_{ m HR}$	T66I;G118R;E138K
	EVG	$_{ m HR}$	
	RAL	$_{ m HR}$	

## Appendix

## Drug abbreviations in full

DRUG.CLASS	ABBREVIATION	DRUG.NAME
	ATV	Atazanavir
	DRV	Darunavir
	FPV	Fosamprenavir
PI	IDV	Indinavir
11	LPV	Lopinavir
	NFV	Nelfinavir
	SQV	Saquinavir
	TPV	Tipranavir
	ABC	Abacavir
	AZT	Azidothymidine
	DFT	Stavudine
NRTI	DDI	Didanosine
	FTC	Emtricitabine
	LMV	Lamivudine
	TDF	Tenofovir
	DOR	Doravirine
	EFV	Efavirenz
NNRTI	ETR	Etravirine
	NVP	Nevirapine
	RPV	Rilpivirine
	BIC	Bictegravir
	CAB	Cabotegravir
INSTI	DTG	Dolutegravir
	EVG	Elvitegravir
	RAL	Raltegravir

## Comments

DRUG.CLASS	COMMENTS
PI	
	L210W is a TAM that usually occurs in combination with M41L and T215Y. The
	combination of M41, L210W and T215Y causes high-level resistance to AZT and
	intermediate resistance to ABC and TDF.
NRTI	L74V causes intermediate ABC resistance. L74I causes low-level ABC resistance.
	M184V/I cause high-level in vitro resistance to 3TC and FTC and low/intermediate
	resistance to ABC (3-fold reduced susceptibility). M184V/I are not contraindications to
	continued treatment with 3TC or FTC because they increase susceptibility to AZT and
	TDF and are associated with clinically significant reductions in HIV-1 replication.
	T215Y/F are TAMs that causes intermediate/high-level resistance to AZT and potentially
	low-level resistance to ABC and TDF.
	E138K is a non-polymorphic mutation selected in a high proportion of persons receiving
	RPV. It reduces RPV susceptibility 2 to 3-fold. In combination with K101E or the
	NRTI-resistance mutation M184I, it is sufficient to cause VF on a first-line RPV-containing
	regimen. E138K causes low-level cross-resistance to ETR.
	K101P is a non-polymorphic mutation that confers high-level resistance to NVP, EFV,
	RPV, and ETR. Its does not appear to reduce DOR susceptibility.

NNRTI	K103T is an extremely rare non-polymorphic mutation that appears to confer intermediate/high-level resistance to NVP but it has little if any effect on EFV susceptibility.  V179L is a rare non-polymorphic mutation listed as a RPV-associated resistance mutation by the FDA package insert. Its effects on NNRTI susceptibility have not been well studied.
INSTI	E138K/A/T are common nonpolymorphic accessory resistance mutations selected in patients receiving RAL, EVG, CAB, and DTG. Alone they do not reduce INSTI susceptibility. However, they contribute to reduced susceptibility in combination with other mutations particularly those at position 148.  T66A/I are non-polymorphic mutations selected in persons receiving EVG, RAL, and DTG usually in combination with other INSTI-resistance mutations. They cause moderate reductions in EVG susceptibility but do not appear to reduce susceptibility to other INSTIs.