PatientID: HIVDR-834-23

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	$\mathbf{S}$	
NRTI	ABC	IR	
	AZT	$^{ m HR}$	
	D4T	$^{ m HR}$	
	DDI	IR	T69G;K70R;M184V;T215F;K219E
	FTC	$_{ m HR}$	
	LMV	$_{ m HR}$	
	TDF	$_{ m LR}$	
NNRTI	DOR	$_{ m HR}$	
	EFV	$_{ m HR}$	
	ETR	IR	A98G;K101E;Y318F;G190A
	NVP	$_{ m HR}$	
	RPV	$_{ m HR}$	
INSTI	BIC	HR	
	CAB	$_{ m HR}$	
	DTG	$_{ m HR}$	T66I;G118R;E138K
	EVG	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			
	K219E/Q/N/R are accessory TAMS that usually occur in combination with multiple other		
	TAMs.  K70R is a TAM that confers intermediate resistance to AZT and contributes to reduced ABC and TDF susceptibility in combination with other TAMs.		
	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.		
NRTI	T215Y/F are TAMs that causes intermediate/high-level resistance to AZT and potentially		
	low-level resistance to ABC and TDF.		
	T69G is a rare non-polymorphic mutation that usually occurs in viruses with a deletion at		
	codon 67 and multiple other NRTI-resistance mutations.		
	A98G is a non-polymorphic accessory mutation associated with low-level reduced		
	susceptibility to each of the NNRTIs.		
	G190A is a non-polymorphic mutation that causes high-level resistance to NVP and		
	intermediate resistance to EFV. It does not significantly reduce susceptibility to RPV,		
	ETR, or DOR.		

NNRTI	K101E is a non-polymorphic accessory mutation that confers intermediate resistance to NVP and RPV and low-level reductions in susceptibility to EFV, ETR, and DOR when it occurs with other NNRTI-resistance mutations.  Y318F is a nonpolymorphic mutation that occurred in 2 of 10 persons with VF and HIVDR while receiving DOR. It confers about 11-fold reduced susceptibility to DOR but otherwise has minimal if any effect on NVP, EFV, and ETR.
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.  E157Q is a polymorphic mutation selected in persons receiving RAL and EVG. It appears to have little effect on INSTI susceptibility.  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.