PatientID: HIVDR-1654-23

Sebuttemba 27, 2023

Color Code

HR: High-Level Resistance
PLR: Potential Low-Level Resistance
LR: Low-Level Resistance
IR: Intermediate Resistance
S: Susceptible

DRUG.CLASS	DRUG	RESISTANCE.PROFILE	DRMS.above.20.percent.prevalence
PI	ATV	**LR**	M46I;I54V;I50V;L76V
	DRV	**IR**	
	FPV	**HR**	
	IDV	**HR**	
	LPV	**HR**	
	NFV	**HR**	
	SQV	**IR**	
	TPV	**LR**	
NRTI	ABC	**IR**	M41L;D67N;L210W;V75M;T215C;T69D;M184IMV
	AZT	**HR**	
	D4T	**HR**	
	DDI	**HR**	
	FTC	**HR**	
	LMV	**HR**	
	TDF	**LR**	
NNRTI	DOR	**HR**	Y181YC;L100IL;M230IM;A98G;P225H;K103N
	EFV	**HR**	
	ETR	**HR**	
	NVP	**HR**	
	RPV	**HR**	
INSTI	BIC	**S**	
	CAB	**S**	
	DTG	**S**	
	EVG	**S**	
	RAL	**S**	

Appendix

Drug abbreviations in full

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

Comments

DRUG.CLASS	COMMENTS
PI	
	I50V is a nonpolymorphic mutation selected by FPV, LPV and DRV. It reduces susceptibility to LPV and DRV.
	I54V is a non-polymorphic PI-selected mutation that contributes reduced susceptibility to each of the PIs except DRV.
	L76V is a non-polymorphic mutation selected by IDV, LPV and DRV and reduces susceptibility to LPV and DRV.
	M46I/L are relatively non-polymorphic PI-selected mutations. In combination with other PI-resistance mutations, they are associated with reduced susceptibility to each of the PIs except DRV.
	D67N is a non-polymorphic TAM associated with low-level resistance to AZT.
	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.
	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	M41L is a TAM that usually occurs with T215Y. In combination, M41L plus T215Y confer intermediate / high-level resistance to AZT and d4T and contribute to reduced ddI, ABC and TDF susceptibility.
	T215Y/F are TAMs that causes intermediate/high-level resistance to AZT and potentially low-level resistance to ABC and TDF. T215S/C/D/E/I/V/N/A/L do not reduce NRTI susceptibility but arise from viruses that once contained T215Y/F. The presence of one of these revertant mutations suggests that the patient may have once been infected with a virus containing T215Y/F.
	T69D is a nonpolymorphic mutation selected by early NRTIs that does not appear to reduce AZT, ABC, or TDF susceptibility.
	V75T/M/A/S are nonpolymorphic accessory NRTI-selected mutations. They appear to have minimal phenotypic effects on AZT, ABC, and TDF.
NNRTI	A98G is a non-polymorphic accessory mutation associated with low-level reduced susceptibility to each of the NNRTIs.
	K103N is a non-polymorphic mutation that confers high-level reductions in NVP and EFV susceptibility. It is the most commonly transmitted DRM.
	L100I is a non-polymorphic mutation that usually occurs in combination with K103N. In this setting it confers high-level resistance to NVP, EFV, and RPV and intermediate resistance to ETR and DOR.
	M230I is a rare mutation selected by RPV. Its effects on NNRTI susceptibility have not been well studied. It also often occurs as a result of APOBEC-mediated G-to-A hypermutation resulting in viruses that are likely to be noninfectious.
	P225H is a non-polymorphic EFV-selected mutation that usually occurs in combination with K103N. The combination of P225H and K103N synergistically reduces NVP, EFV and DOR susceptibility.
	Y181C is a non-polymorphic mutation selected in persons receiving NVP, ETR and RPV. It confers high-level resistance to NVP, intermediate resistance to ETR and RPV, and low-level resistance to EFV. It does not significantly reduce DOR susceptibility.
INSTI	