PatientID: HDR11

Okitobba 06, 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**	V82A
	DRV	**S**	
	FPV	**LR**	
	IDV	**IR**	
	LPV	**IR**	
	NFV	**IR**	
	SQV	**LR**	
	TPV	**S**	
NRTI	ABC	**HR**	M41L;K70E;Q151L;L210W;T215I
	AZT	**HR**	
	D4T	**HR**	
	DDI	**HR**	
	FTC	**LR**	
	LMV	**LR**	
	TDF	**IR**	
NNRTI	DOR	**HR**	G190E;K101H;K103N
	EFV	**HR**	
	ETR	**IR**	
	NVP	**HR**	
	RPV	**HR**	
INSTI	BIC	**IR**	R263K
	CAB	**IR**	
	DTG	**IR**	
	EVG	**IR**	
	RAL	**LR**	

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	
	V82A is a non-polymorphic mutation selected primarily by IDV and LPV. It is associated with reduced susceptibility to LPV and to a lesser extent ATV. It increases DRV susceptibility.
	K70/E/Q/N/T/S/G cause low-leve resistance to ABC and TDF.
	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.
	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.
	Q151M causes intermediate/high-level resistance to AZT and ABC, and low-level resistance to TDF, 3TC and FTC. In combination with two or more accessory mutations at positions 62, 75, 77, and 116, it confers high-level resistance to AZT and ABC and intermediate resistance to TDF, 3TC and FTC. Q151L is an extremely rare transitional mutation that may precede the emergence of the Q151M.

NRTI	
	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.
NNRTI	G190E is an uncommon non-polymorphic mutation associated with reduced replication capacity that confers intermediate to high-level resistance to each of the NNRTIs. G190Q is a rare NNRTI-selected mutation that confers high-level NVP and EFV resistance. Its effects on RPV, ETR, and DOR susceptibility is not known.
	K101H is a non-polymorphic accessory mutation selected by NVP, EFV and ETR. When present with other NNRTI-resistance mutations, it contributes reduces susceptibility to these NNRTIs.
	K103N is a non-polymorphic mutation that confers high-level reductions in NVP and EFV susceptibility. It is the most commonly transmitted DRM.
INSTI	
	R263K is a nonpolymorphic mutation selected in vitro by EVG, DTG, BIC, and CAB. It occurs in a high proportion of persons who develop VF and emergent HIVDR while receiving DTG. Alone, it reduces DTG, BIC, and CAB susceptibility about 2-fold.