

PatientID: GU121700

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
INSTI	BIC	HR	N155NH;E92QE;G140SG;Q148KQ;H51HY;G163RG
	CAB	HR	
	DTG	HR	
	EVG	HR	
	RAL	HR	

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	
NRTI	
NNRTI	
	E92Q is a common non-polymorphic mutation selected in persons receiving RAL and EVG. It reduces RAL susceptibility 5 to 10-fold and EVG susceptibility ~30-fold. It does not reduce susceptibility to BIC, CAB, and DTG.
	G140S/A/C are non-polymorphic mutations that usually occur with Q148 mutations. Alone, they have minimal effects on INSTI susceptibility. However, in combination with Q148 mutations they are associated with high-level resistance to RAL and EVG and intermediate reductions in DTG and BIC susceptibility.
	G163R/K are nonpolymorphic in all subtypes except subtype F. They are accessory resistance mutations as they usually occur in combination with other INSTI-resistance mutations particularly N155H.
	H51Y is an uncommon nonpolymorphic accessory mutation selected in vitro by EVG, DTG, and CAB. Alone, it has minimal if any effect on INSTI susceptibility.

INSTI	<p>N155H is a common nonpolymorphic INSTI-resistance mutations. It has been reported in a high proportion of persons developing VF and HIVDR while receiving RAL, EVG, DTG, and CAB. Alone, it reduces RAL and EVG susceptibility about 10 and 30-fold, respectively. It has minimal effect on susceptibility to DTG, BIC, and CAB.</p>
	<p>Q148H/K/R are nonpolymorphic mutations reported in persons receiving RAL, EVG, CAB, and DTG. They nearly always occur in combination with G140A/S or E138K. In this setting they are associated with near complete resistance to RAL and EVG, high-levels of reduction in CAB susceptibility, and low-to-intermediate reductions in DTG and BIC susceptibility.</p>