

**ANRS - AC 11: RESISTANCE GROUP
GENOTYPE INTERPRETATION FOR HIV-2**

GENOTYPE INTERPRETATION: NUCLEOSIDE AND NUCLEOTIDE REVERSE TRANSCRIPTASE INHIBITORS [1]

	Mutations associated with resistance	Mutations associated with « possible resistance »
ZDV	<ul style="list-style-type: none"> • Q151M • S215A/C/F/L/Y + 1 mutation among K65R, N69S/T, K70R, Y115F, K223R 	<ul style="list-style-type: none"> • S215A/C/F/L/Y
3TC/FTC	<ul style="list-style-type: none"> • M184I/V 	<ul style="list-style-type: none"> • K65R
ddl *	<ul style="list-style-type: none"> • K65R • L74V • Q151M 	
d4T *	<ul style="list-style-type: none"> • Q151M • S215A/C/F/L/Y + 1 mutation among K65R, N69S/T, K70R, Y115F, K223R 	<ul style="list-style-type: none"> • K65R • S215A/C/F/L/Y
ABC	<ul style="list-style-type: none"> • K65R • Q151M • M184I/V + 1 mutation among: L74V, Y115F 	<ul style="list-style-type: none"> • 2 mutations among: D67N, K70N/R, M184V/I, S215A/C/F/L/Y
TDF/TAF	<ul style="list-style-type: none"> • K65R • Q151M + V111I 	

ZDV: zidovudine, 3TC: lamivudine, FTC: emtricitabine, ddl: didanosine, d4T: stavudine, ABC: abacavir, TDF: tenofovir, TAF : tenofovir alafenamide

* : not recommended

GENOTYPE INTERPRETATION: PROTEASE INHIBITORS [1]

	Mutations associated with resistance	Mutations associated with « possible resistance »
SQV	<ul style="list-style-type: none"> • G48V • L90M 	<ul style="list-style-type: none"> • I84V
LPV	<ul style="list-style-type: none"> • 2 mutations among: I82F, I84V, L90M • I54M • V47A 	<ul style="list-style-type: none"> • V62A + L99F • 1 mutation among: I82F, I84V, L90M
DRV	<ul style="list-style-type: none"> • I50V • I54M • I84V + L90M 	<ul style="list-style-type: none"> • 1 mutation among: I84V, L90M
IDV*	<ul style="list-style-type: none"> • I54M • I82F • I84V • V62A + L99F • L90M 	
ATV*	<ul style="list-style-type: none"> • I50L • I82F 	<ul style="list-style-type: none"> • I54L
FPV	<ul style="list-style-type: none"> • Natural resistance 	
TPV*		

SQV: saquinavir, , FPV: fosamprenavir, LPV: lopinavir, ATV:atazanavir, TPV: tipranavir, DRV : darunavir

* : not recommended

GENOTYPE INTERPRETATION: INTEGRASE STRAND TRANSFER INHIBITORS [1]

	Mutations associated with resistance	Mutations associated with « possible resistance »
RAL	<ul style="list-style-type: none"> • N155H/R • Q148K/R • E92Q + T97A • Y143C/G/R + 1 mutation among: E92Q, T97A 	<ul style="list-style-type: none"> • E92Q • Y143C/G/R
EVG	<ul style="list-style-type: none"> • E92G/Q • Q148K/R • N155H • T97A + Y143C 	<ul style="list-style-type: none"> • Y143C
DTG	<ul style="list-style-type: none"> • Q148K • G140S + Q148R • E92Q + N155H • T97A + N155H 	<ul style="list-style-type: none"> • Q148R • N155H • E92Q • T97A + Y143C

RAL: raltegravir, **EVG:** elvitegravir, **DTG:** dolutegravir

NON-NUCLEOSIDE REVERSE TRANSCRIPTASE INHIBITORS
<ul style="list-style-type: none"> • Naturally resistant to all NNRTI [2]
FUSION INHIBITOR
<ul style="list-style-type: none"> • Naturally resistant to T20 [2]

REFERENCES

- 1/ Charpentier C et al. HIV-2EU-Supporting Standardized HIV-2 Drug-Resistance Interpretation in Europe: An Update. Clin Infect Dis. 2015 Jul 17. pii: civ572
- 2/ Witvrouw E et al. Susceptibility of HIV-2, SIV and SHIV to various anti-HIV-1 compounds: implications for treatment and postexposure prophylaxis. Antivir Ther 2004; 9(1): 57-65.