

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	<ul style="list-style-type: none"> • K65R • Q151M + V111I 	

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

GENOTYPE INTERPRETATION: PROTEASE INHIBITORS [1]

	Mutations associated with resistance	Mutations associated with « possible resistance »
SQV	<ul style="list-style-type: none"> • G48V • I54M + I82F • I84V • L90M 	<ul style="list-style-type: none"> • I54L/M
LPV	<ul style="list-style-type: none"> • I84V + L90M + 1 mutation among: I54M, I82F • I54M +I82F • V47A 	<ul style="list-style-type: none"> • V62A + L99F • 1 mutation among: I54M, I82F + 1 mutation among I84V, L90M
DRV	<ul style="list-style-type: none"> • I50V + I84V 	<ul style="list-style-type: none"> • I50V • I54M • I84V
FPV	<ul style="list-style-type: none"> • Natural resistance 	
ATV	<ul style="list-style-type: none"> • Conflicting data, not currently recommended 	
TPV	<ul style="list-style-type: none"> • Not recommended 	

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

GENOTYPE INTERPRETATION: INTEGRASE INHIBITORS [1]

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

RAL: raltegravir

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

HIV-2

1/ Charpentier C et al. HIV-2EU: Supporting Standardized HIV-2 Drug Resistance Interpretation in Europe. Clin Inf Dis; 2013; 56; 1654-1658

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.