Drug resistance interpretation: PR HIVDB 9.5.1 (2023-11-05)

PI Major Mutations:

None

PI Accessory Mutations:

None

PR Other Mutations: L

L101 92% - 113V 95% - G16E 93% - E35D 95% - M36I 95% - R41K 95% - H69K 95% - L89M 97% 0504-44,010 - C004-54,028 - H69K 0504-44,010 - L89M 97% 0504-23,706

Protease Inhibitors

 atazanavir/r (ATV/r)
 Susceptible

 darunavir/r (DRV/r)
 Susceptible

 lopinavir/r (LPV/r)
 Susceptible

PR comments

Other

• L10I/V are polymorphic, PI-selected accessory mutations that increase the replication of viruses with other PI-resistance mutations.

Mutation scoring: PR

HIVDB 9.5.1 (2023-11-05)

No drug resistance mutations were found for Pl.

Drug resistance interpretation: RT

HIVDB 9.5.1 (2023-11-05)

NNRTI Mutations: Y181C 23% G190S 27% C000727.181

RT Other Mutations: E6D 90% V35T 90% CONFERRITOR STORM V35T 90% CONFERRITOR

Non-nucleoside Reverse Transcriptase Inhibitors

R356K 50% - M357R 50% - R358K 57% - G359S 54% - K366R 50% - T369A 50% - E370ED # 54%, D. 15% - A371V 54% - I375V 57% - A376V 57% - T377M 50%

Nucleoside Reverse Transcriptase Inhibitors

abacavir (ABC) High-Level Resistance doravirine (DOR) Intermediate Resistance zidovudine (AZT) Susceptible High-Level Resistance efavirenz (EFV) emtricitabine (FTC) Intermediate Resistance etravirine (ETR) Intermediate Resistance High-Level Resistance Intermediate Resistance lamivudine (3TC) nevirapine (NVP) tenofovir (TDF) High-Level Resistance rilpivirine (RPV) High-Level Resistance

RT comments

NRTI

- K65R confers intermediate reductions in susceptibility to TDF, ABC, and 3TC/FTC. It increases AZT susceptibility. In NRTI-experienced, INSTI-naive patients with K65R, TDF+3TC+DTG. However, in patients receiving TDF+3TC+DTG, there is a risk of emergent DTG resistance that does not arise in NRTI-naive patients receiving TDF+3TC+DTG.
- . \$686 is a polymorphic mutation that is often selected in combination with K65R. It partially restores the replication defect associated with K65R.
- Amino acid deletions between codons 67 and 70 are rare and usually occur in combination with multiple TAMs. Deletions at positions 69 and 70 are more often associated with K65R or the Q151M mutation complex. Deletions at codon 68 are extremely rare and less well characterized.

NNRTI

- 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.
- 6190S is a non-polymorphic mutation that confers high-level resistance to NVP and EFV. It may also be associated low-levels reductions in DOR susceptibility. It does not appear to be selected by ETR or RPV or to reduce their in vitro susceptibility.

Other

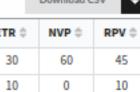
- . K101Q is a relatively non-polymorphic mutation that is weakly selected in persons receiving NVP and EFV. It is of uncertain phenotypic and clinical significance.
- V179I is a polymorphic mutation that is frequently selected in persons receiving ETR and RPV. However, it has little, if any, direct effect on NNRTI susceptibility.

Total

Drug	resistance	mutation	scores

Drug resistance m		Download CSV			
Rule	ABC \$	AZT \$	FTC ÷	зтс ≑	TDF ÷
<u>K65R</u>	45	-10	30	30	50
T69del	15	0	15	15	15
K65R + S68G	0	0	0	0	5





70

45 45

rug resistance mut		Download CSV			
Rule	DOR \$	EFV \$	ETR \$	NVP \$	R
<u>Y181C</u>	10	30	30	60	
<u>Y181C + G190S</u>	10	0	10	0	
G190S	20	60	10	60	
Total	40	90	50	120	