Drug resistance interpretation: PR
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PI Major Mutations: 184V 100%

PI Accessory Mutations: L10F :: K20T :: L89T :

PR Other Mutations: 113V - 135D - 135D - 135D - 135D - 145D - 145

Protease Inhibitors

atazanavir/r (ATV/r) High-Level Resistance darunavir/r (DRV/r) Low-Level Resistance High-Level Resistance fosamprenavir/r (FPV/r) High-Level Resistance indinavir/r (IDV/r) lopinavir/r (LPV/r) Intermediate Resistance nelfinavir (NFV) High-Level Resistance saquinavir/r (SQV/r) High-Level Resistance tipranavir/r (TPV/r) Intermediate Resistance

PR comments

Major

. 184V is a nonpolymorphic substrate-cleft mutation selected by each of the PIs. 184V reduces susceptibility to LPV, ATV, and DRV.

Accessory

- L10F is a common non-polymorphic, PI-selected accessory mutation associated with reduced in vitro susceptibility to LPV and DRV.
- K20T is a non-polymorphic accessory PI-selected mutation associated with reduced susceptibility to ATV and LPV.
- L89V is a nonpolymorphic accessory mutation weakly selected by each of the PIs. It appears to be minimally associated with reduced PI susceptibility. L89T is an uncommon non-polymorphic PI-selected mutation selected primarily by ATV.

mul.

- A71V/T are polymorphic, PI-selected accessory mutations that increase the replication of viruses with other PI-resistance mutations.
- . There is evidence for low-level DRV resistance. If DRV is administered it should be used twice daily.

Mutation scoring: PR

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Orug resistance mutation scores of PI:							Download CSV	
Rule	ATV/r ≑	DRV/r ÷	FPV/r ≎	IDV/r ≑	LPV/r ≑	NFV ≑	SQV/r ≑	TPV/r 0
K20T	5	0	5	5	0	15	5	0
184V	60	15	60	60	30	60	60	30
L10F	0	5	15	10	5	15	0	0
Total	65	20	-80	75	35	90	65	30

Drug resistance interpretation: RT

M41ML = 07.1 m • M184V m ... • T215Y m

NNRTI Mutations: K103N

E6D :::: V21I ::: V35T :::: V60I ::: K64R ::: V60I ::: K64R ::: V60I ::: K64R ::: V60I ::: K173A ::: V21I ::: V60I ::: K173A ::: V21I ::: V60I ::: K173A ::: V60I ::: K173A ::: V60I :: V60I ::: V60I :: V60I ::: V60I ::: V60I ::: V60I ::: V60I ::: V60I ::: V60I :: V60I :

Nucleoside Reverse	Transcriptase Inhibitors	Non-n
abacavir (ABC)	Intermediate Resistance	doravirine (I
zidovudine (AZT)	High-Level Resistance	efavirenz (EF
stavudine (D4T)	Intermediate Resistance	etravirine (E
didanosine (DDI)	Intermediate Resistance	nevirapine ()
emtricitabine (FTC)	High-Level Resistance	rilpivirine (R
lamivudine (3TC)	High-Level Resistance	
tenofovir (TDF)	Low-Level Resistance	

Non-nucleoside Reverse Transcriptase Inhibitors

oravirine (DOR)

favirenz (EFV)

travirine (ETR)

evirapine (NVP)

Upivirine (RPV)

Susceptible

High-Level Resistance

Susceptible

Susceptible

RT comments

NRTI Mutations:

RT Other Mutations:

NRTI

- . M41L is a TAM that usually occurs with T213Y. In combination, M41L plus T213Y confer intermediate / high-level resistance to AZT and d4T and contribute to reduced ddt, ABC and TDF susceptibility.
- M184V/I cause high-level in vitro resistance to 3TC and FTC and low/intermediate resistance to ABC (3-fold reduced susceptibility). M184V/I are not continued treatment with 3TC or FTC because they increase susceptibility to AZT and TDF and are associated with clinically significant reductions in HIV-1 replication.
- T215Y/F are TAMs that causes intermediate/high-level resistance to AZT and potentially low-level resistance to ABC and TDF.

NNRTI

K103N is a non-polymorphic mutation that confers high-level reductions in NVP and EFV susceptibility. It is the most commonly transmitted DRM.

Other

. V118I is a polymorphic accessory NRTI-resistance mutation that often occurs in combination with multiple TAMs.

Drug resistance mutation scores of NRTI:

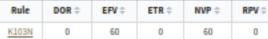
Rule M41ML

M41ML+M184V+T215Y

M41ML+T215Y

M184V T215Y

Total



Drug resistance mutation scores of NNRTI:

Download CSV

ABC
AZT
D4T
DDI
FTC
3TC
TDF

5 15 15 10 0 0 5

10 0 0 0 0 0 0

15 -10 -10 10 60 60 -10

50 75 55 45 65 65 15

10 10 5 5 10

RPV

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