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

PI Major Mutations: None
PI Accessory Mutations: None

PR Other Mutations: V11R • T12P • I13L • K14L • I15L • G16E • Q18K • L19I • E21* • A22V • T26Y • G27R • A28S • M36X • R41N • K43X • R57K • L63T • V77I

Protease Inhibitors

atazanavir/r (ATV/r) Susceptible darunavir/r (DRV/r) Susceptible Susceptible fosamprenavir/r (FPV/r) indinavir/r (IDV/r) Susceptible lopinavir/r (LPV/r) Susceptible nelfinavir (NFV) Susceptible saquinavir/r (SQV/r) Susceptible tipranavir/r (TPV/r) Susceptible

Mutation scoring: PR

No drug resistance mutations were found for Pl.

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

HIVDB 9.5.1 (2023-11-05)

NRTI Mutations: M184V • K219R

NNRTI Mutations: K103N • V108I • F227L

RT Other Mutations: K20R • V35T • T39A • E40D • K49R • V60I • H96P • K102R • V118C • K122E • I135T • I142V • K166N • D177E • D185X • E203K • Q207E • E224N • P226Y • L228R • G231V • K238Q • V245I • \(\Delta 246 \) • P247A • \(\Delta 252 \) • \(\Delta 254S \) • \(\Delta 258S \) • \(

Nucleoside Reverse Transcriptase Inhibitors

Non-nucleoside Reverse Transcriptase Inhibitors

abacavir (ABC) Low-Level Resistance doravirine (DOR) High-Level Resistance zidovudine (AZT) Susceptible High-Level Resistance efavirenz (EFV) stavudine (D4T) Susceptible etravirine (ETR) Susceptible Low-Level Resistance didanosine (DDI) nevirapine (NVP) High-Level Resistance emtricitabine (FTC) High-Level Resistance rilpivirine (RPV) Susceptible lamivudine (3TC) High-Level Resistance

RT comments

tenofovir (TDF)

NRTI

- 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 contraindications to 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.
- K219E/Q/N/R are accessory TAMS that usually occur in combination with multiple other TAMs.

Susceptible

NNRTI

- . K103N is a non-polymorphic mutation that confers high-level reductions in NVP and EFV susceptibility. It is the most commonly transmitted DRM.
- V108I is a relatively non-polymorphic accessory mutation selected in vitro and/or in vivo with each of the NNRTIs. It appears to contribute to reduced susceptibility to most NNRTIs only in combination with other NNRTI-resistance mutations.
- F227L is a non-polymorphic mutation that usually occurs in combination with V106A. It is selected in vivo and in vitro with both NVP and DOR. In this context it is associated with high-level reductions in EFV susceptibility. F227I/V are extremely rare mutations that have been selected in vitro by DOR.

Other

K238T/N are uncommon non-polymorphic mutations selected in persons receiving NVP and EFV usually in combination with K103N. Alone, K238T/N appear to have minimal effects on NNRTI susceptibility. K238Q is a highly unusual mutation at this position.

Mutation scoring: RT HIVDB 9.5.1 (2023-11-05)

Total

Drug resistance mutation scores of NRTI:						Download CSV		
Rule	ABC \$	AZT \$	D4T ÷	DDI ÷	FTC ÷	зтс ≑	TDF ÷	
M184V	15	-10	-10	10	60	60	-10	
K219R	5	10	10	5	0	0	5	
Total	20	0	0	15	60	60	-5	

rug resista	ince mutatioi	Download	CSV -	•		
Rule	DOR \$	EFV \$	ETR ÷	NVP ≑	RPV ÷	
V108I	10	10	0	15	0	
F227L	60	15	0	30	0	
K103N	0	60	0	60	0	

85

105