Drug resistance interpretation: PR

HIVDB 9.5.1 (2023-11-05)

PI Major Mutations: None
PI Accessory Mutations: F53Y
PR Other Mutations: I13V • E35D • M36I • R41K • K45R • R57K • L63S • H69K • L89M

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

PR comments

Accessory

- F53L is a nonpolymorphic accessory mutation selected primarily by SQV, IDV, ATV and LPV. In combination with other mutations, it is associated with reduced susceptibility to ATV and possibly LPV. **F53Y** is an uncommon nonpolymorphic accessory PI-selected mutation that has not been well studied.

Mutation scoring: PR

HIVDB 9.5.1 (2023-11-05)

No drug resistance mutations were found for PI.

Drug resistance interpretation: RT

HIVDB 9.5.1 (2023-11-05)

NRTI Mutations: None
NNRTI Mutations: None
RT Other Mutations: E6A • K11T • K20R • V21I • V35T • T39N • K122E • S162A • K173S • Q174K • D177E • V179I • T200A • I202V • R206K • Q207N • R211K • V245Q • D250E • I542V • A554S • V559I

Nucleoside Reverse Transcriptase Inhibitors	
abacavir (ABC)	Susceptible
zidovudine (AZT)	Susceptible
stavudine (D4T)	Susceptible
didanosine (DDI)	Susceptible
emtricitabine (FTC)	Susceptible
lamivudine (3TC)	Susceptible
tenofovir (TDF)	Susceptible

Non-nucleoside Reverse Transcriptase Inhibitors	
doravirine (DOR)	Susceptible
efavirenz (EFV)	Susceptible
etravirine (ETR)	Susceptible
nevirapine (NVP)	Susceptible
rilpivirine (RPV)	Susceptible

RT comments

Other

- **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.

Mutation scoring: RT

HIVDB 9.5.1 (2023-11-05)

No drug resistance mutations were found for NRTI.

No drug resistance mutations were found for NNRTI.

Drug resistance interpretation: IN

HIVDB 9.5.1 (2023-11-05)

INSTI Major Mutations: None
INSTI Accessory Mutations: None
IN Other Mutations: E11D • S24N • V31I • E92EK • L101V • T112V • T124A • T125A • G134N • K136Q • G149GR • D167E • V201I • I208M • Q216H

Integrase Strand Transfer Inhibitors	
bictegravir (BIC)	Susceptible
cabotegravir (CAB)	Susceptible
dolutegravir (DTG)	Susceptible
elvitegravir (EVG)	Susceptible
raltegravir (RAL)	Susceptible

IN comments

Other

- E92Q is a common non-polymorphic mutation selected in persons receiving RAL and EVG. It reduces RAL susceptibility 5 to 10-fold and EVG susceptibility ~30-fold. It does not reduce susceptibility to BIC, CAB, and DTG. E92G/V are rare nonpolymorphic mutations that reduce EVG susceptibility >=10-fold but do not appear to reduce susceptibility to other INSTIs. **E92K** is an unusual mutation at this position.

Mutation scoring: IN

HIVDB 9.5.1 (2023-11-05)

No drug resistance mutations were found for INSTI.