

PI Major Mutations:None

PI Accessory Mutations:None

PI Other Mutations:I13V 100%
seen=8,038 • I15V 100%
seen=6,302 • E35D 17%
seen=8,252 • M36I 100%
seen=8,252 • R41K 40%
seen=8,381 • R57K 10%
seen=8,625 • H69K 10%
seen=8,305 • L89M 100%
seen=8,381

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

No drug resistance mutations were found for PI.

NRTI Mutations:[D67N](#) 10%
seen=1887 • [K219Q](#) 100%
seen=1,315

NNRTI Mutations:[K103NS](#) 1.14%
seen=203 N: 42%

RT Other Mutations:K11T 100%
seen=1,038 • K20R 100%
seen=2,408 • V35T 10%
seen=1,677 • T39E 10%
seen=1,321 • V60I 100%
seen=1,332 • K122E 100%
seen=875 • D123N 100%
seen=874 • I135T 100%
seen=1,383 • K173ST 1.10%
seen=2,483 T: 40% • D177E 40%
seen=2,528 • T200TA 1.10%
seen=2,377 T: 10% • I202V 10%
seen=2,375 • Q207A 100%
seen=1,862 • V245Q 10%
seen=1,318 • E248D 10%
seen=1,303 • A554S 10%
seen=134

Nucleoside Reverse Transcriptase Inhibitors		Non-nucleoside Reverse Transcriptase Inhibitors	
abacavir (ABC)	Potential Low-Level Resistance	doravirine (DOR)	Susceptible
zidovudine (AZT)	Low-Level Resistance	efavirenz (EFV)	High-Level Resistance
stavudine (D4T)	Low-Level Resistance	etravirine (ETR)	Susceptible
didanosine (DDI)	Potential Low-Level Resistance	nevirapine (NVP)	High-Level Resistance
emtricitabine (FTC)	Susceptible	rilpivirine (RPV)	Susceptible
lamivudine (3TC)	Susceptible		
tenofovir (TDF)	Potential Low-Level Resistance		

RT comments

NRTI

- [D67N](#) is a non-polymorphic TAM associated with low-level resistance to AZT.
- [K219E/Q/N/R](#) are accessory TAMs that usually occur in combination with multiple other TAMs.

NNRTI

- [K103N](#) is a non-polymorphic mutation that confers high-level reductions in NVP and EFV susceptibility. It is the most commonly transmitted DRM.
- [K103S](#) is a non-polymorphic mutation that causes high-level reductions in NVP susceptibility but intermediate reductions in EFV susceptibility. Because [K103S](#) is a 2-bp change from the wildtype K and a 1-bp change from K103N, persons with [K103S](#) may be likely to have once had K103N.

Drug resistance mutation scores of NRTI:

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Rule	ABC ⚡	AZT ⚡	D4T ⚡	DDI ⚡	FTC ⚡	3TC ⚡	TDF ⚡
D67N	5	15	15	5	0	0	5
K219Q	5	10	10	5	0	0	5
Total	10	25	25	10	0	0	10

Drug resistance mutation scores of NNRTI:

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Rule	DOR ⚡	EFV ⚡	ETR ⚡	NVP ⚡	RPV ⚡
K103NS	0	60	0	60	0

INSTI Major Mutations:None

INSTI Accessory Mutations:None

IN Other Mutations:K14R 100%
seen=1,302 • S245N 1.12%
seen=1,321 N: 14% • V31I 100%
seen=1,617 • I60M 100%
seen=882 • T112V 10%
seen=787 • I113V 100%
seen=787 • T124A 10%
seen=831 • T125A 100%
seen=831 • V126F 10%
seen=832 • G134N 10%
seen=781 • K136Q 100%
seen=782 • V165I 10%
seen=888 • V201I 10%
seen=888 • S283G 10%
seen=1,312

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

No drug resistance mutations were found for INSTI.