

Patient: [REDACTED]
 DOB: [REDACTED] Age: [REDACTED] Sex: [REDACTED]
 Patient Identifiers: [REDACTED]
 Visit Number (FIN): [REDACTED]

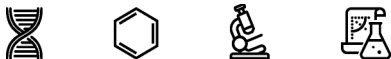
Client: [REDACTED]
 Physician: [REDACTED]

ARUP Test Code: 3003853
 Collection Date: 08/24/2023
 Received in lab: 08/24/2023
 Completion Date: 08/28/2023

Human Immunodeficiency Virus 1 by Next Generation Sequencing

Drug Class	Drug	Evidence of Resistance
INSTI	Bictegravir, BIC	Intermediate Resistance
	Cabotegravir, CAB	Intermediate Resistance
	Dolutegravir, DTG	Intermediate Resistance
	Elvitegravir, EVG	Intermediate Resistance
	Raltegravir, RAL	Low-Level Resistance
PI	Atazanavir, ATV	Susceptible
	Darunavir, DRV	Susceptible
	Fosamprenavir, FPV	Susceptible
	Indinavir, IDV	Susceptible
	Lopinavir, LPV	Susceptible
	Nelfinavir, NFV	Susceptible
	Saquinavir, SQV	Susceptible
Tipranavir, TPV	Susceptible	
NRTI	Abacavir, ABC	High-Level Resistance
	Zidovudine, AZT	Susceptible
	Stavudine, D4T	Low-Level Resistance
	Didanosine, DDI	High-Level Resistance
	Emtricitabine, FTC	High-Level Resistance
	Lamivudine, LMV	High-Level Resistance
Tenofovir, TDF	Intermediate Resistance	
NNRTI	Doravirine, DOR	Susceptible
	Efavirenz, EFV	High-Level Resistance
	Etravirine, ETR	Susceptible
	Nevirapine, NVP	High-Level Resistance
	Rilpivirine, RPV	Susceptible

Drug Class	Drug Resistance Mutations Identified
INSTI	R263K
PI	None
NRTI	K65E, K70N, L74V, Y115F, M184V
NNRTI	K103N



Patient: [REDACTED]
 ARUP Accession: 23-236-116356

Human Immunodeficiency Virus 1 Drug Resistance by Next Generation Sequencing

Patient: [REDACTED] | Date of Birth: [REDACTED] | Sex: [REDACTED] | Physician: [REDACTED]
Patient Identifiers: [REDACTED] | Visit Number (FIN): [REDACTED]

Gene Accessory Resistance Mutations Identified

IN	A49G
PR	None
RT	None

Additional Mutations:

Integrase:

S17N, L45I, M50I, K111R, I113V, S119R, T124A, T125A, V126L, V201I, K211R, I220V

Protease:

L63P, I64V, A71T, I72E, V77I, I93L

Reverse Transcriptase:

E6K, K22R, V35I, K64R, K122E, I135L, I178M, T200A, Q207D, R211K, T286A, I293V, E297A, E297P, P313S, D324E, I329L, P345Q, F346Y, A360T, V365I, I375V, S379C, V381I, K390R, A400T

HIVGenotyper Software Version: 2.1.0.4

Stanford HIV Drug Resistance Database Version: HIVDB_9.4

Additional Information

INTERPRETIVE INFORMATION: HIV-1 Drug Resistance by NGS

This assay predicts HIV-1 resistance to protease inhibitors, nucleoside reverse transcriptase inhibitors, non-nucleoside reverse transcriptase inhibitors and integrase inhibitors. The protease gene, integrase gene and the reverse transcriptase gene of the viral genome are sequenced using Next Generation Sequencing. Drug resistance is assigned using the Stanford hivdb database.

This test should be used in conjunction with clinical presentation and other laboratory markers. A patient's response to therapy depends on multiple factors, including patient adherence, percentage of resistant virus population, dosing, and drug pharmacology issues.

This test detects populations down to 10 percent of the total population which may account for resistance interpretation differences between methods. Some insertions or deletions may be difficult to detect using this software.

This test was developed, and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

