Genotypic ARV Resistance Report

Patient Information

Our Ref. ID: VCI-20435

Name:	♂ ธวัช ศรีทอง	**Your Ref. ID:**	P21-03075
Hospital/Site:	PLEDTA	**Study/Visit:**	
Risk Factor:	No Information	**Collection Date:**	24-Mar-2021
Clinical Staging:	No Information	**CDC Staging:** No Information	**Genotyping Date:** 01-Apr-2021

Lab Information

Current CD4:	347 cells/mm3	(24-Mar-2021)	**Current Antiretroviral:** Unknown
Current VL:	21400 copies/ml	(24-Mar-2021)	

Summary Data

Subtype and % similarity to closest reference isolate: CRF01_AE (96.4%)

Sequence includes RT: condons: 20 - 244

Resistance Report (RT)

RT TAMs: -

RT NRTIs: M184V

RT NNRTIs: K101H, G190A

RT Other: V35T, T39K, K43E, K122E, D123S, K173I, Q174K, D177E, I178L, T200A, E203D, Q207A, R211S, K238R

Antiretroviral	High-level resistance	Intermediate resistance	Low-level resistance	Potential low-level resistance	Susceptible
NRTI					
zidovudine (AZT)					
tenofovir (TDF)					
stavudine (D4T)					
lamivudine (3TC)					
emtricitabine (FTC)					
didanosine (DDI)					
abacavir (ABC)					
NNRTI					
rilpivirine (RPV)					
nevirapine (NVP)					
etravirine (ETR)					
efavirenz (EFV)					
doravirine (DOR)					

ConsensusR#20435RT.txt

Remark: 1. Although the mutation is not found, it does not mean that one is fully susceptible to the treatment since the resistant virus may be minor population which cannot be detected by the assay (detectable limit = viral load 1,000 copies/ml).
2. The accumulation of TAMs (M41L, D67N, K70R, L210W, T215Y/F, K219Q/E) increases resistance to tenofovir. Mutations M41L and L210W, contribute more than others
3. References: Stanford dBase system (http://hivdb.stanford.edu/)

Reported by: _____ Date: 1/4/2021

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Mutation Scoring

	NRTI							*NNRTI*			
	3TC	ABC	AZT	D4T	DDI	FTC	TDF	EFV	ETR	NVP	RPV
G190A	-	-	-	-	-	-	-	45	10	60	15
K101H	-	-	-	-	-	-	-	10	10	15	10
M184V	60	15	-10	-10	10	60	-10	-	-	-	-
Total :	60	15	-10	-10	10	60	-10	55	20	75	25

RT Comments

Other
- K238R is a common polymorphism that does not reduce NNRTI susceptibility.

NRTI
- M184V/I cause high-level in vitro resistance to 3TC and FTC and low-level resistance to ddI and ABC. However, M184V/I are not contraindications to continued treatment with 3TC or FTC because they increase susceptibility to AZT, TDF and d4T and are associated with clinically significant reductions in HIV-1 replication.

NNRTI
- G190A is a non-polymorphic mutation that causes high-level resistance to NVP and intermediate resistance to EFV. It has a weight of 1.0 in the Tibotec ETR genotypic susceptibility score but does not appear to be selected by ETR or RPV or to reduce their in vitro susceptibility in the absence of other NNRTI-resistance mutations. It also does not appear to reduce DOR susceptibility.
- K101H is a non-polymorphic accessory mutation selected by NVP, EFV and ETR. When present with other NNRTI-resistance mutations, K101H further reduces susceptibility to these NNRTIs. It has a weight of 1.0 in the Tibotec ETR genotypic susceptibility score. Its effect on DOR susceptibility is not known.

Dosage
- This virus is predicted to have low-level reduced susceptibility to RPV. The use of the combination of CAB/RPV should be considered to be relatively contraindicated.

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