

Table S1: Primers used to detect M184V, T215Y/F, K103N and Y181C mutations.

Mutations			Primer sequence	HXB2 location	Product length
NRTIs	M184V	Wt	5'-TAAATCAGATCCTACATACAAATCATACAT-3'	3099-3128	
		Mut	5'-TAAGTCAGATCCTACATATAAATCATCCTC-3'	3099-3128	328bp
	T215Y/F	Wt	5'-TTCTTTCTGATGTTTCTTATCTGGTGTGGT-3'	3192-3221	
		Mut	5'-TTCTTTCTGATGTTTCTTATCTGGTGGGWA-3'	3192-3221	421bp
	Common forward		5'-CTCAAGACTTCTGGGAGGTCT-3'	2800-2820	
NNRTIs	K103N	Wt	5'-TCTCCCACATCCAGTACTGTTACTGATGTT-3'	2858-2887	
		Mut	5'-TCTCCCACATCCAGTACTGTTACTGAGTTR-3'	2858-2887	300bp
	Y181C	Wt	5'-ATCCTACATATAAATCATCCACATATTGRT-3'	3091-3120	
		Mut	5'-ATCCTACATATAAATCATCCACATATGGRC-3'	3091-3120	533bp
	Common forward		5'-AGCCAGGAATGGATGGCCCAA-3'	2587-2607	

NRTIs, Nucleoside Reverse Transcriptase Inhibitors; NNRTIs, Non-NRTIs; HXB2, HIV-1 subtype B reference sequence.

Table S2: HIV-1 drug resistance mutations by HIV-1 subtypes (CRF02_AG vs non-CRF02_AG)

ARV Class	Mutation	CRF02_AG (n=53)		Non-CRF02_AG (n=22)	
		Sequencing (%)	ARMS-PCR (%)	Sequencing (%)	ARMS-PCR (%)
NRTI	M184V	23 (43.3)	27 (50.9)	9 (40.9)	8 (36.3)
	T215Y/F	9 (16.9)	12 (22.6)	5 (22.7)	3 (13.6)
NNRTI	K103N	22 (41.5)	20 (37.7)	1 (4.5)	1 (4.5)
	Y181C	4 (7.5)	6 (11.3)	3 (13.6)	3 (13.6)

ARV, Antiretroviral; ART, Antiretroviral Treatment; NRTI, Nucleoside Reverse Transcriptase Inhibitor; NNRTI, Non-NRTI. Percentages were calculated in each column based on the number of individuals in each group (CRF02_AG or Non-CRF02_AG).

ARMS-PCR

primers

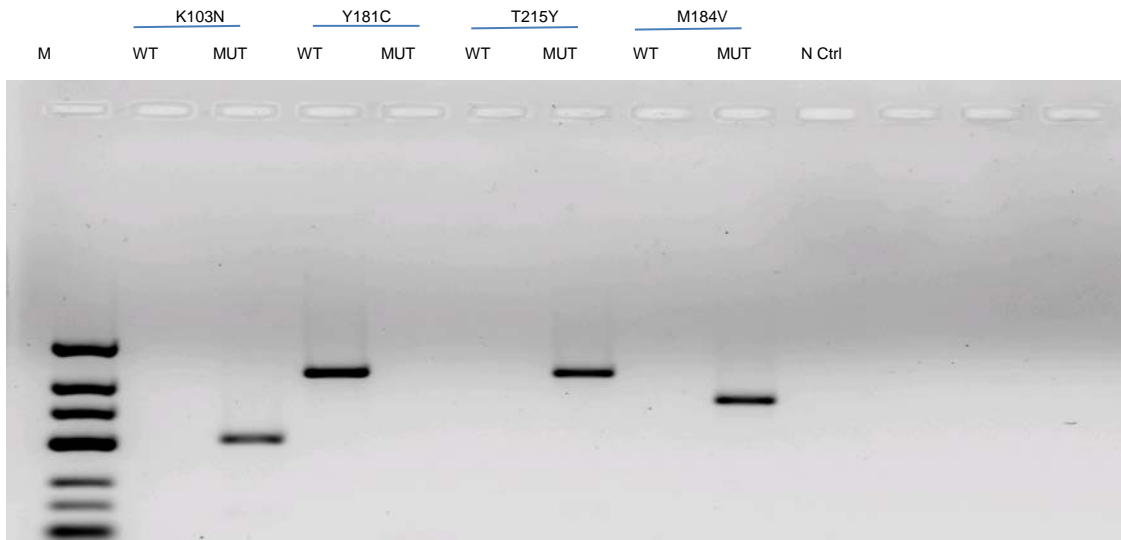
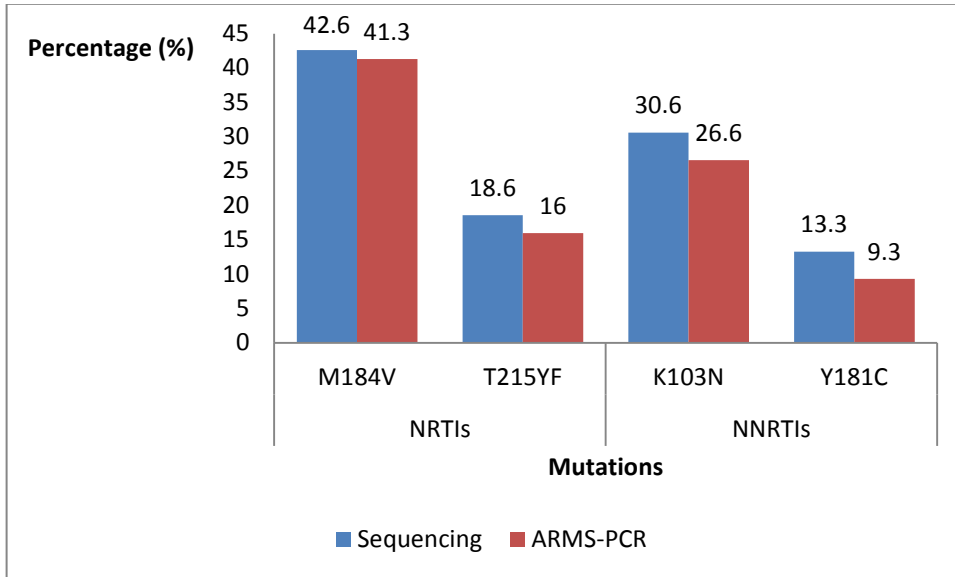
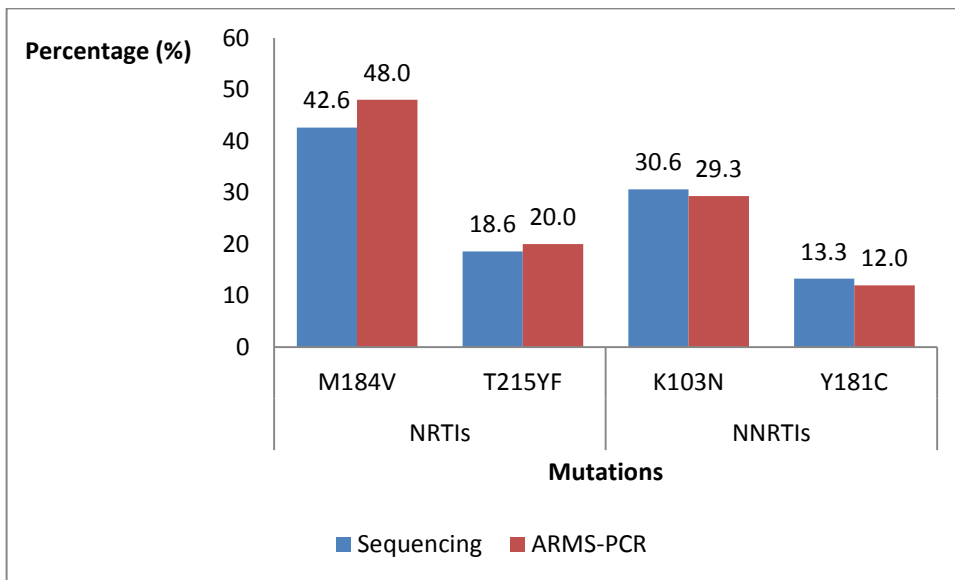


Figure S1: Determination of mutation profile of NIH clone (ARP#12229) with the ARMS-PCR assay. This clone is mutant for amino acid (AA) 103 (lane3; 300bp), wild type for AA 181 (lane 4; 533bp), and mutant for AA 215 (lane 9; 421bp), mutant for AA 184 (lane 7; 328bp). M, low range DNA ladder (Thermo Scientific); N Ctrl, negative control.



a) Patient level



b) Population level

Figure S2: The prevalence of the different mutations as determined by sequence analysis and ARMS-PCR when comparing corresponding samples for each patient (a) and at the population level (b). NRTI, Nucleoside Reverse Transcriptase Inhibitor; NNRTI, Non-NRTI; HIV-1 drug resistance mutations analyzed: M184V, T215Y/F, K103N, Y181C.