

Supplementary Table S1. Multi-class drug-resistance-associated mutations detected among all cases (n=3904)

Inhibitor	NRTI-R	NNRTI-R	PI-R	n	Year collected
NRTI+NNRTI	M184V	K103N		1	2011
	M41L L74I L210W	K103N		1	2011
NRTI+PI	M41L D67N T215C		V32I M46I V47V L90M	1	2007
	M41L D67N M184V L210W T215S		V32I M46IL I53L L54V V82A L90M	1	2008
	D67G M184V		N88S	1	2008
	K65R		M46I	1	2010
	M41L		N88D	1	2010
	M184V		D30N M46I V82A N88D	1	2012
	V77L		M46I	1	2012
	T215S K219Q		M46I	1	2012
		K103N	M46L	3	2010
		K103N	M46L	1	2012
NNRTI+PI		K103N	M46IL	1	2012
		V106M	M46I	1	2012
3-CLASS	M41L T215D	Y181C	M46I I84V	1	2009
	K219Q	K103N Y181C	I54V	1	2012

NRTI, nucleotide reverse transcriptase inhibitor; NNRTI, non-nucleoside reverse transcriptase inhibitor; PI, protease inhibitor

Supplementary Table S2. Drug-resistance-associated mutations detected each year among recent and long-term seroconverters

A) Recent seroconverters (n=468)

	2007	2008	2009	2010	2011	2012
n=	68	99	64	76	82	79
M41L					2 (2.4%)	1 (1.3%)
D67E		1 (1.0%)				
NRTI	T69D			1 (1.3%)		
L210W					2 (2.4%)	
T215X	4 (5.9%)	1 (1.0%)	4 (6.3%)	2 (2.6%)	4 (4.9%)	3 (3.8%)
K219QR			1 (1.6%)			1 (1.3%)
NNRTI	K103N				1 (1.2%)	
P225H					1 (1.2%)	
PI	D30N				1 (1.2%)	
M46IL	1 (1.5%)	5 (5.1%)	2 (3.1%)	2 (2.6%)	2 (2.4%)	3 (3.8%)
N88D					1 (1.2%)	

B) Long-term seroconverters (n=935)

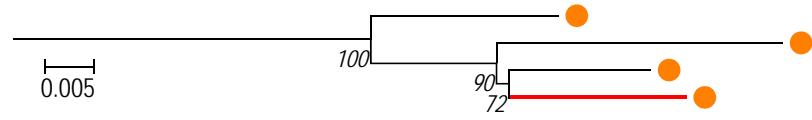
		2007	2008	2009	2010	2011	2012
	n=	100	142	129	166	189	209
NRTI	M41L	1 (1.0%)			1 (0.6%)	1 (0.5%)	
	K65R				1 (0.6%)		
	D67N	1 (1.0%)				1 (0.5%)	
	K70R				1 (0.6%)		
	F77L			1 (0.8%)			
	M184V					1 (0.5%)	1 (0.5%)
	L210W	1 (1.0%)				1 (0.5%)	
	T215X	4 (4.0%)	2 (1.4%)	4 (3.1%)	5 (3.0%)	9 (4.8%)	4 (1.9%)
	K219N					1 (0.5%)	
	K101E				1 (0.6%)	1 (0.5%)	1 (0.5%)
NNRTI	K103NS	2 (2.0%)	2 (1.4%)	1 (0.8%)	5 (3.0%)	2 (1.1%)	3 (1.4%)
	V106M					1 (0.5%)	
	G190A					1 (0.5%)	
	P225H				1 (0.6%)		
PI	M230L					1 (0.5%)	
	D30N				4 (2.4%)		
	M46IL	1 (1.0%)	5 (3.5%)	4 (3.1%)	6 (3.6%)	1 (0.5%)	12 (5.7%)
	I85V			1 (0.8%)			
	N88D				3 (1.8%)		
	L90M			1 (0.8%)			

NRTI, nucleoside reverse transcriptase inhibitor; NNRTI, non-nucleoside reverse transcriptase inhibitor; PI, protease inhibitor

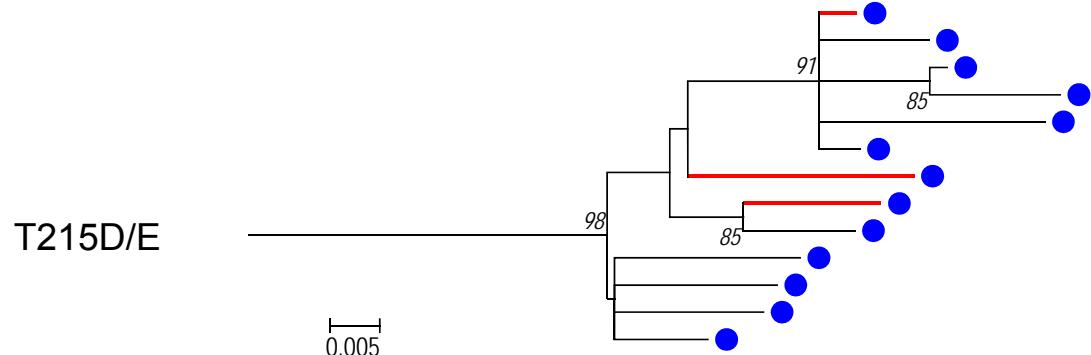
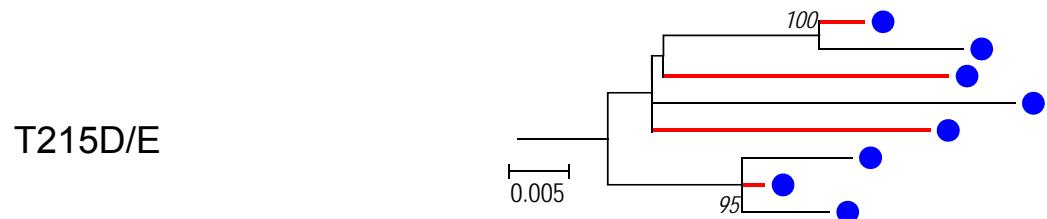
FIGURE S1. Subtrees of a maximum likelihood tree in which sequences with drug-resistant mutations are concentrated.

Subtrees comprising of sequences with A) D30N/N88D, B) T215 revertant, and C) K103N are zoomed up from the maximum likelihood tree (Fig. 2). Recent seroconverters are shown in red branches and long-term seroconverters in black. Number left of a node is the bootstrap values >70.

A) D30N/N88D



B) T215 revertant



C) K103N

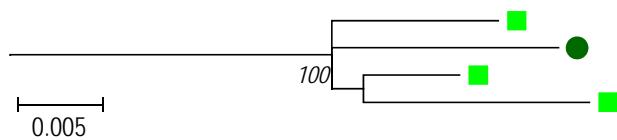
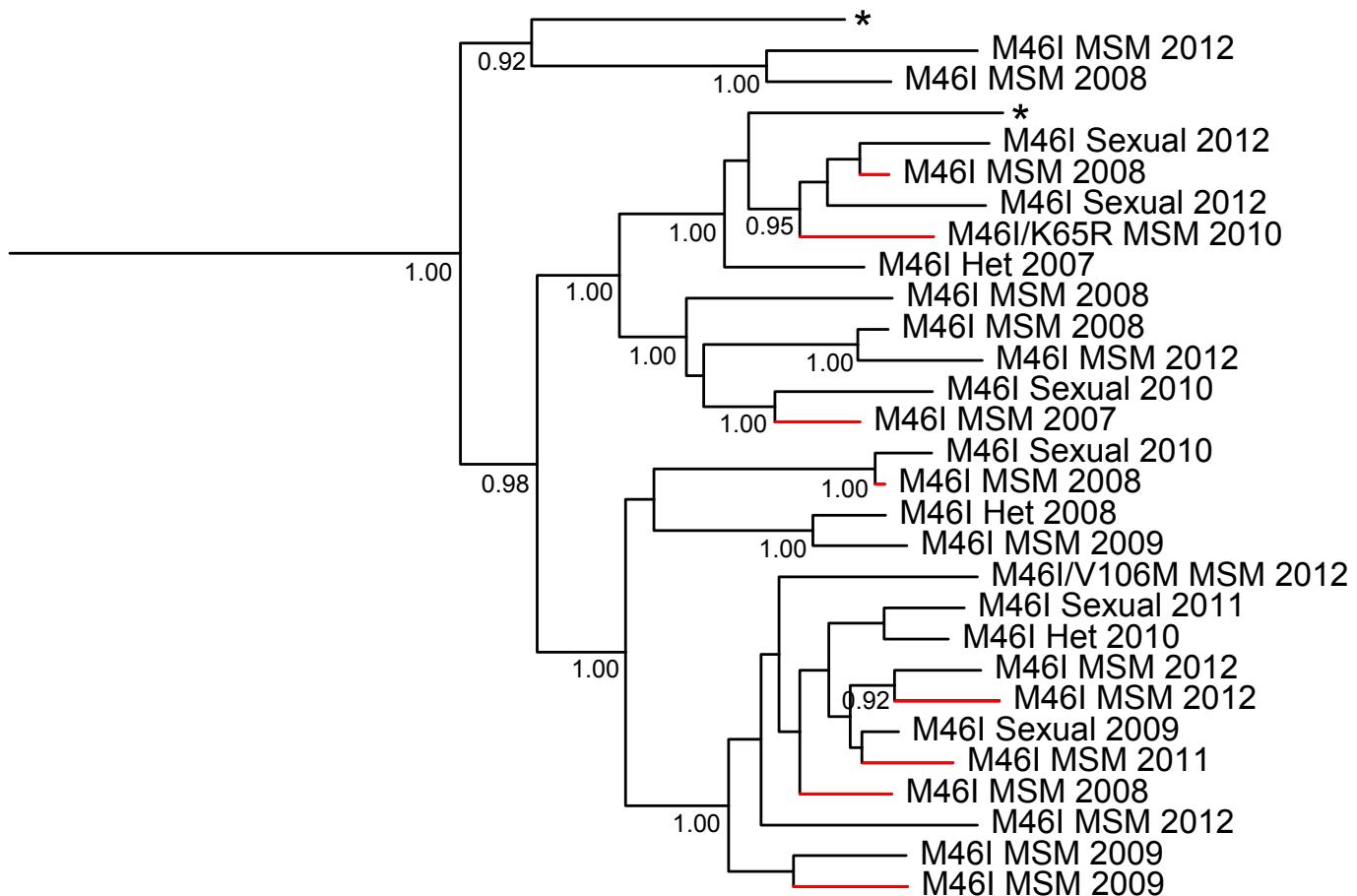


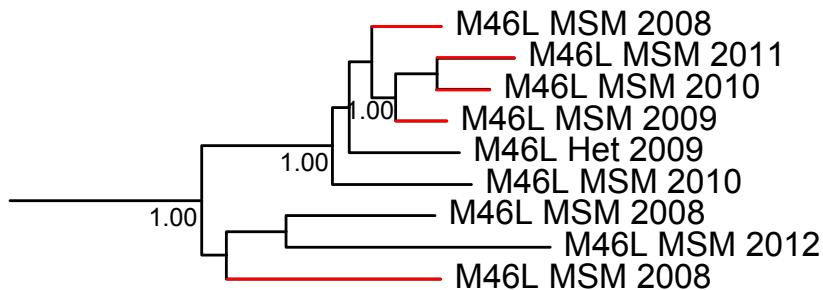
FIGURE S2. Subtrees of a Bayesian maximum clade credibility tree in which sequences with drug resistant mutations are concentrated.

Subtrees comprising of sequences with A) M46I, B) M46L, C) D30N/N88D, D) T215 revertant and E) K103N. Number left of a node is the posterior probability (>0.95) of corresponding cluster. Detected drug-resistant mutation, risk behavior, and the year of sample collection for each sample are shown. Recent seroconverters are indicated with red branches and long-term seroconverters in black. Asterisks depict sequences in which the M46I mutation was not detected. Het: heterosexual risk behavior; MSM: men who have sex with men; Sexual: non-specified sexual risk behavior.

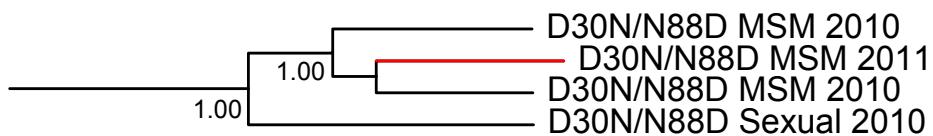
A) M46I



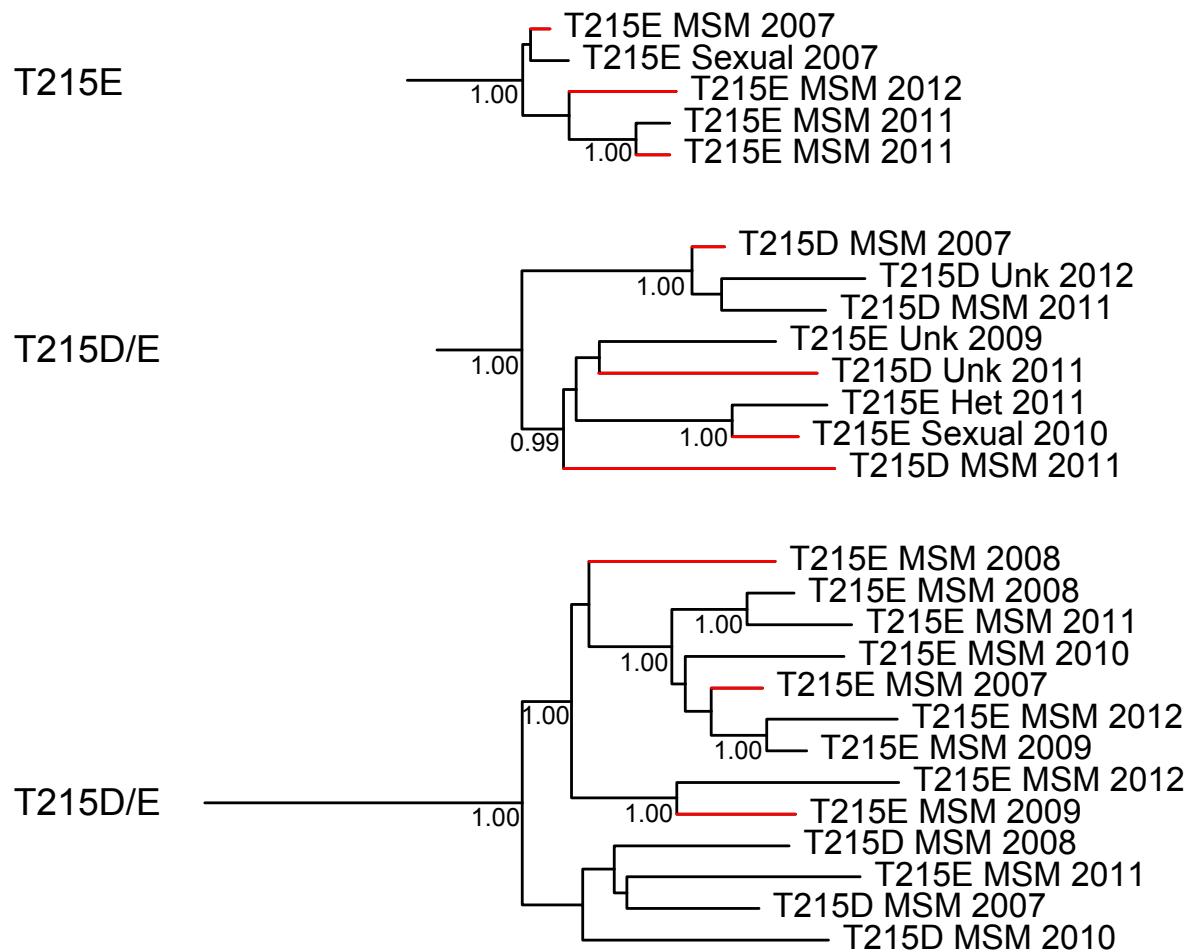
B) M46L



C) D30N/N88D



D) T215 revertant



E) K103N

