

phenotype prediction from genotype (version 3.4)

## I. General information

Patient:		Study Id:	
Birth date:		Viral load:	
Sample received:		Sample collected:	
Sample ID:	46	Predicted subtype:	B (100%)
Sample type:		Report date:	October 6, 2018
Physician:		Reported by:	

## II. Substitutions (relative to the reference strain HXB2)

Protease:	V3I, L10F, I15V, S37N, R41K, M46I, K55R, I62I/V, L63P, A71T, G73G/S, V82T, I84V, I85V, L89L/M
Reverse transcriptase:	

## III. Phenotype prediction

Drug	Resistance Factor RF (*)	z-score	Scored Positions (**)
ZDV	0	0	
ddI	0	0	
d4T	0	0	
3TC	0	0	
ABC	0	0	
TDF	0	0	
NVP	0	0	
EFV	0	0	
ETR (***)	Susceptible		
RPV (***)	Susceptible		
SQV	22.18	8.866	48G <u>84V</u> 90L 54I 11V 74T 88N 53F 95C <u>26T</u> 1P 80T 34E 47I 97L
IDV	40.471	9.475	54I 88N 29D 1P <u>84V</u> 71T 21E <u>65E</u> <u>46I</u> 11V 30D 90L <u>73S</u> 78G 98N
NFV	13.584	5.578	88N 54I 30D <u>84V</u> <u>97L</u> 20K 68G 90L 36M <u>46I</u> 31T 75V 74T <u>5L</u> 2Q
APV	11.546	7.389	54I 76L 50I <u>84V</u> 32V <u>46I</u> 82T <u>10F</u> 22A <u>63P</u> 1P 47I 13I <u>97L</u> 45K
LPV	30.105	9.982	54I 50I <u>46I</u> <u>84V</u> 76L 22A <u>10F</u> 7Q <u>63P</u> 24L 20K 25D 47I 92Q 90L
TPV	2.978	2.341	69H <u>46I</u> <u>48G</u> <u>84V</u> 33L 54I <u>82T</u> 47I 72I 91T 20K <u>15V</u> 90L 74T 88N
DRV	10.668	6.173	47I <u>84V</u> 54I 33L 76L 74T 43K 36M <u>65E</u> <u>10F</u> 48G 93I <u>85V</u> 7Q <u>62V</u>
ATV	11.989	7.047	54I 48G <u>84V</u> 71T 4T 88N 90L <u>7Q</u> <u>73S</u> 36M 20K 24L <u>76L</u> 45K 32V

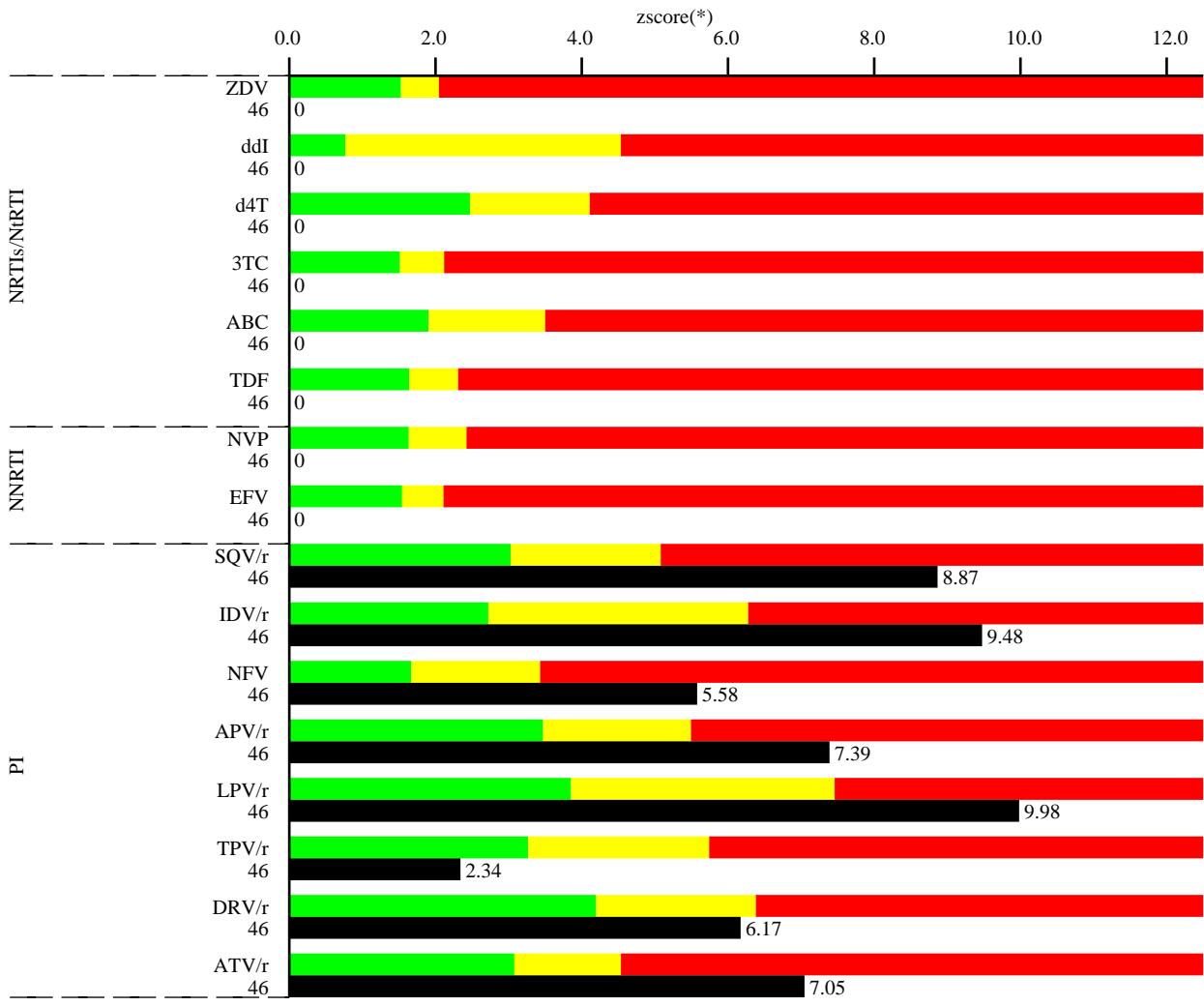
(\*) based on LIBSVM, Copyright (c) 2000, Chih-Chung Chang and Chih-Jen Lin

(\*\*) Positions are ordered according to their impact on the phenotype prediction. Differences with respect to HXB2 are underlined. Positions shown in red and in green contribute to an increase or decrease in resistance, respectively. At most 15 positions are shown for each drug.

(\*\*\*) Resistance predictions and scored mutations for ETR and RPV were performed with rules-based drug-resistance interpretation models by HIV-GRADE (<http://www.hiv-grade.de>)

## IV. Interpretation

Patient:	Birth date:	Sampling date:
Current therapy:		Viral load:



■ susceptible   ■ intermediate   ■ resistant

(\*)number of standard deviations above mean of drug naive patients. Negative z-scores may indicate hypersusceptibility.

NRTIs/NtRTI:

NNRTIs:

PIs:

Previous genotypes:

date

signature