

phenotype prediction from genotype (version 3.4)

## I. General information

Patient:	Study Id:
Birth date:	Viral load:
Sample received:	Sample collected:
Sample ID: 39	Predicted subtype: B (100%)
Sample type:	Report date: October 6, 2018
Physician:	Reported by:

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

Protease:	V3I, L10I, T12P, I15V, K20R, V32I/V, M36I, S37D, M46L, I54L, L63P, A71V, T74S/T, P79S, V82A/V, I84V, I85V, L90M, I93L
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	113.167	13.605	48G <u>84V</u> <u>73G</u> <u>11V</u> <u>88N</u> <u>90M</u> <u>53F</u> <u>95C</u> <u>26T</u> <u>1P</u> <u>80T</u> <u>34E</u> <u>54L</u> <u>47I</u> <u>97L</u>
IDV	401.033	15.679	<u>54L</u> <u>88N</u> <u>90M</u> <u>29D</u> <u>1P</u> <u>84V</u> <u>73G</u> <u>21E</u> <u>65E</u> <u>32I</u> <u>11V</u> <u>10I</u> <u>30D</u> <u>78G</u> <u>98N</u>
NFV	202.613	11.942	88N <u>30D</u> <u>90M</u> <u>84V</u> <u>97L</u> <u>73G</u> <u>68G</u> <u>31T</u> <u>75V</u> <u>54L</u> <u>5L</u> <u>2Q</u> <u>1P</u> <u>29D</u> <u>48G</u>
APV	198.8	16.394	<u>76L</u> <u>50I</u> <u>84V</u> <u>32I</u> <u>54L</u> <u>37D</u> <u>22A</u> <u>63P</u> <u>1P</u> <u>47I</u> <u>13I</u> <u>90M</u> <u>97L</u> <u>45K</u> <u>10I</u>
LPV	182.575	15.2	<u>50I</u> <u>84V</u> <u>76L</u> <u>54L</u> <u>22A</u> <u>7Q</u> <u>63P</u> <u>24L</u> <u>25D</u> <u>82A</u> <u>74S</u> <u>37D</u> <u>47I</u> <u>92Q</u> <u>2Q</u>
TPV	13.891	5.68	<u>69H</u> <u>48G</u> <u>84V</u> <u>33L</u> <u>90M</u> <u>47I</u> <u>72I</u> <u>91T</u> <u>71V</u> <u>15V</u> <u>54L</u> <u>82V</u> <u>74S</u> <u>88N</u> <u>58Q</u>
DRV	19.195	7.753	<u>47I</u> <u>84V</u> <u>33L</u> <u>76L</u> <u>43K</u> <u>73G</u> <u>74S</u> <u>37D</u> <u>65E</u> <u>93L</u> <u>48G</u> <u>32I</u> <u>85V</u> <u>7Q</u> <u>8R</u>
ATV	371.154	17.667	48G <u>73G</u> <u>84V</u> <u>90M</u> <u>82A</u> <u>4T</u> <u>46L</u> <u>88N</u> <u>7Q</u> <u>24L</u> <u>76L</u> <u>45K</u> <u>32I</u> <u>54L</u> <u>93L</u>

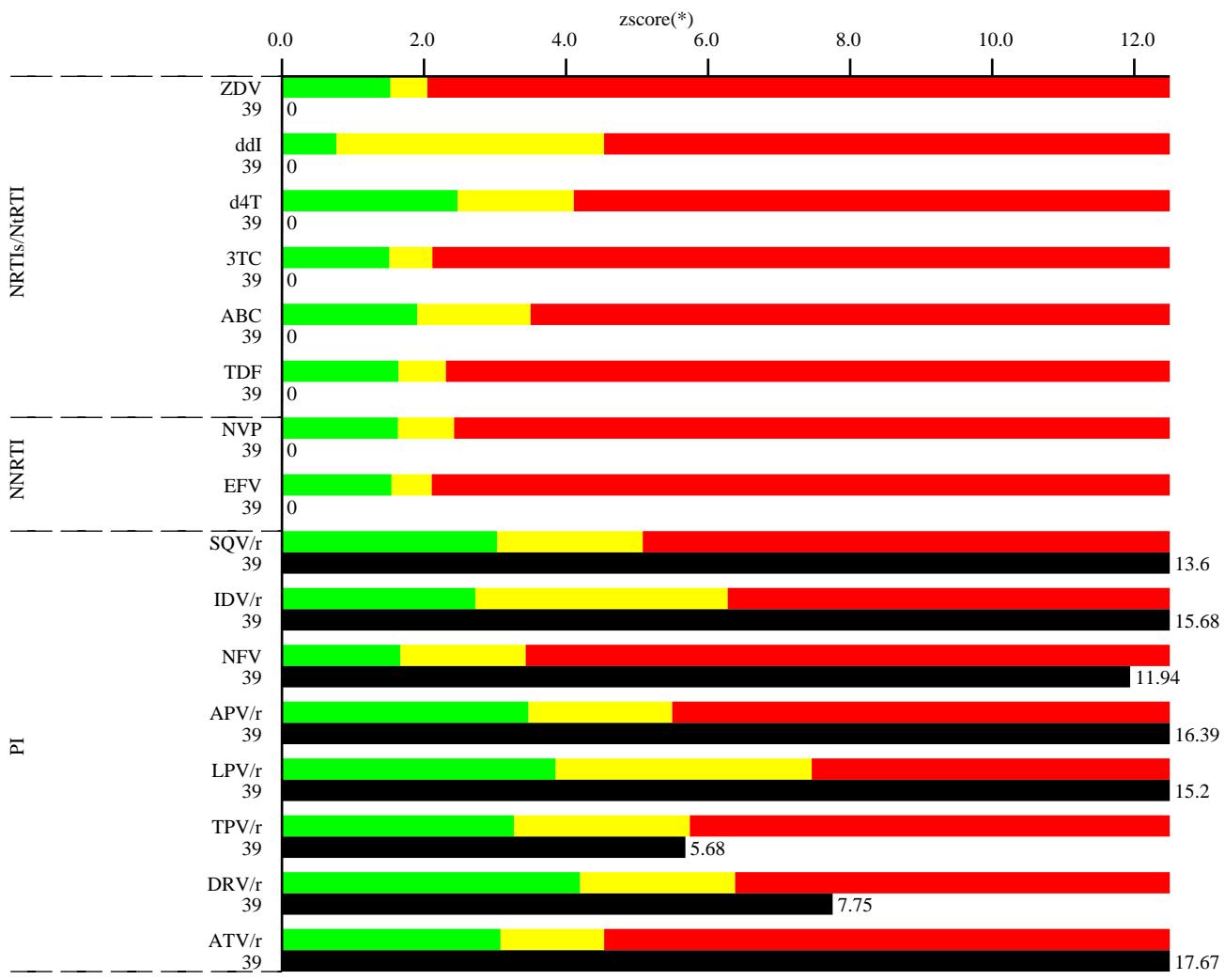
(\*) based on LIBSVM, Copyright (c) 2000, Chih-Chung Chang and Chih-Jen Lin

(\*\*) 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