



phenotype prediction from genotype (version 3.4)

## I. General information

|                  |                              |
|------------------|------------------------------|
| Patient:         | Study Id:                    |
| Birth date:      | Viral load:                  |
| Sample received: | Sample collected:            |
| Sample ID: 21    | Predicted subtype: C (100%)  |
| Sample type:     | Report date: October 6, 2018 |
| Physician:       | Reported by:                 |

## II. Substitutions

(relative to the reference strain HXB2)

|                        |   |
|------------------------|---|
| Protease:              | V3I, T12S, I15V, L19V, M36I, S37N, R41K, Q61H, L63P, H69K, I72I/M, L89M, 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       | 1.924                    | 1.758   | 48G 73G 90L 84I 54I <u>11V</u> 74T 88N 53F 95C <u>26T</u> <u>1P</u> 71A 80T <u>34E</u>                |
| IDV       | 1.349                    | 0.273   | <u>54I</u> 82V 88N 46M 29D <u>1P</u> 73G 21E <u>65E</u> 84I <u>11V</u> 71A 85I <u>30D</u> 90L         |
| NFV       | 1.456                    | 0.319   | 88N 54I 30D 46M 82V <u>97L</u> 20K 73G <u>68G</u> 90L 71A <u>31T</u> 75V 74T 84I                      |
| APV       | 0.934                    | -0.567  | 54I 76L 50I 84I 46M 32V 85I <u>22A</u> <u>63P</u> <u>1P</u> 47I 13I 82V <u>89M</u> <u>97L</u>         |
| LPV       | 0.725                    | -0.807  | 54I 82V 46M 84I 50I 76L 10L <u>22A</u> 71A <u>7Q</u> <u>63P</u> 24L 20K 25D 47I                       |
| TPV       | 0.749                    | -0.651  | <u>48G</u> 84I 33L 54I 47I <u>89M</u> 71A <u>91T</u> 20K <u>69K</u> <u>15V</u> 90L 82V 74T <u>46M</u> |
| DRV       | 0.826                    | -0.711  | 47I 84I 54I 33L 76L 74T 43K 73G 46M 71A <u>65E</u> <u>93L</u> <u>89M</u> 48G 10L                      |
| ATV       | 0.972                    | -0.725  | 54I 48G 73G 84I 82V 4T 71A 88N 90L <u>7Q</u> 46M 20K 24L <u>76L</u> 45K                               |

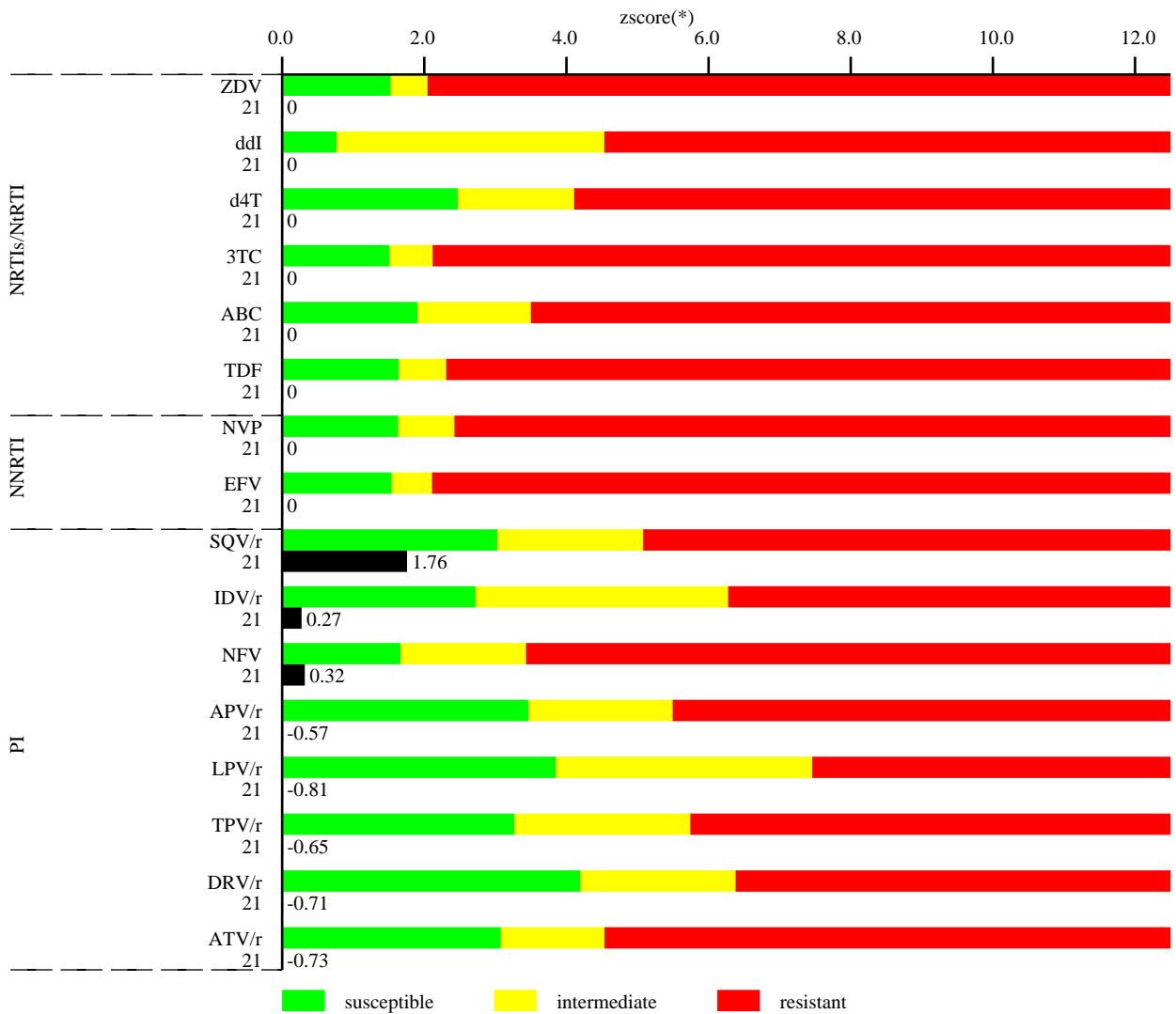
(\*) based on LIBSVM, Copyright (c) 2000, Chih-Chung Chang and Chih-Jen Lin

(\*\*) 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: |                |



NRTIs/NtRTI:

NNRTIs:

PIs:

Previous genotypes:

date

signature