British Columbia
Centre *for* Excellence
*in* HIV/AIDS

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# Resistance Analysis of HIV-1 Protease and Reverse Transcriptase

| Patient/Sample Details | | Test Details | | Physician Details |
|---|---|---|---|---|
| Name: | CJC | Sample ID: | 63436C-DRT | MAZZULLI |
| | | Sample Date: | 28-Apr-2015 | MAZZULLI |
| Patient ID: | 15Y0032803 | Study ID: | DRT | |
| Secondary ID: | | Report Date: | 27-May-2015 | |
| Birthdate: | 21-Apr-1958 | Clade: | B | |

| NRTI/NtRTI Drugs | Fold Change[1] | Cut-off[2] | | Resistance Analysis[3] |
|---|---|---|---|---|
| Zidovudine (Retrovir) | 1.2 | 1.5 | 11.4 | SUSCEPTIBLE |
| Lamivudine (Epivir) | 47.2 | *2.1* | 4.6 | RESISTANT |
| Didanosine (Videx) | 1.2 | 0.9 | 2.6 | REDUCED RESPONSE |
| Stavudine (Zerit) | 0.8 | 1.0 | 2.3 | SUSCEPTIBLE |
| Abacavir (Ziagen) | 1.5 | 0.9 | 3.5 | REDUCED RESPONSE |
| Emtricitabine (Emtriva) | 39.8 | *3.1* | | RESISTANT |
| Tenofovir DF (Viread) | 0.7 | 1.0 | 2.3 | SUSCEPTIBLE |
| **NRTI/NtRTI Mutations[4]: 70wt/R, 184V** | | | | |

| NNRTI Drugs | Fold Change[1] | Cut-off[2] | | Resistance Analysis[3] |
|---|---|---|---|---|
| Nevirapine (Viramune) | 43.1 | *6.0* | | RESISTANT |
| Efavirenz (Sustiva, Stocrin) | 27.0 | *3.3* | | RESISTANT |
| Etravirine (Intelence) | 0.9 | *3.2* | 27.6 | SUSCEPTIBLE |
| Rilpivirine (Endurant) | 1.0 | *3.1* | | SUSCEPTIBLE |
| **NNRTI Mutations[4]: 103N** | | | | |

| PI Drugs | Fold Change[1] | Cut-off[2] | | Resistance Analysis[3] |
|---|---|---|---|---|
| Indinavir/r (Crixivan) | 0.9 | 2.3 | 27.2 | SUSCEPTIBLE |
| Nelfinavir (Viracept) | 1.2 | 2.2 | 9.4 | SUSCEPTIBLE |
| Saquinavir/r (Invirase) | 0.7 | 3.1 | 22.6 | SUSCEPTIBLE |
| Fosamprenavir/r (Lexiva, Telzir) | 0.8 | 1.5 | 19.5 | SUSCEPTIBLE |
| Lopinavir/r (Kaletra) | 0.8 | 6.1 | 51.2 | SUSCEPTIBLE |
| Atazanavir/r (Reyataz) | 0.7 | 2.5 | 32.5 | SUSCEPTIBLE |
| Tipranavir/r (Aptivus) | 0.8 | 1.5 | 7.0 | SUSCEPTIBLE |
| Darunavir/r (Prezista) | 0.6 | 10.0 | 106.9 | SUSCEPTIBLE |
| **PI Mutations[4]: 10I** | | | | |

This nucleic acid amplification, sequence-based test was developed and its performance characteristics determined by the BCCfE Research Laboratory. US Clients only: This test does not require premarket review by the US Food and Drug Administration and has not been approved by the FDA. The laboratory is certified under CLIA '88 to perform high complexity clinical laboratory testing. This test is used for clinical purposes.

1. Predicted Fold Change in 50% Inhibitory Concentration (IC50), relative to susceptible reference virus based on a large database of genotypes and phenotypes (Version CFE-5.0).
2. Cut-off values for maximal and minimal clinical response (Clinical Cut-Off) or for normal susceptibility range in vitro (Biological Cut-Off). Biological Cut-Offs are printed in Italic.
3. Resistance Analysis based on the magnitude of the Fold Change relative to the Clinical or the Biological Cut-Offs. 4. Mutations indicated are those reported on public lists (ANRS, Stanford, IAS-USA) or by drug development sponsors.

For more information on these results and their interpretation, or to suggest how to improve this report please contact the lab at (800) 517-1119 or email prharrigan@cfenet.ubc.ca