

PatientID: HIVDR-826-23

Sebuttemba 27, 2023

### Color Code

■ HR: High-Level Resistance    ■ PLR: Potential Low-Level Resistance  
■ LR: Low-Level Resistance    ■ IR: Intermediate Resistance  
■ S: Susceptible

| DRUG.CLASS | DRUG | RESISTANCE.PROFILE | DRMS.above.20.percent.prevalence |
|------------|------|--------------------|----------------------------------|
| PI         | ATV  | HR                 | M46I;I54V;I50V;V82AV             |
|            | DRV  | LR                 |                                  |
|            | FPV  | HR                 |                                  |
|            | IDV  | HR                 |                                  |
|            | LPV  | HR                 |                                  |
|            | NFV  | HR                 |                                  |
|            | SQV  | HR                 |                                  |
|            | TPV  | LR                 |                                  |
| NRTI       | ABC  | HR                 | D67G;K70R;M184V;T215F;K219E      |
|            | AZT  | HR                 |                                  |
|            | D4T  | HR                 |                                  |
|            | DDI  | HR                 |                                  |
|            | FTC  | HR                 |                                  |
|            | LMV  | HR                 |                                  |
|            | TDF  | IR                 |                                  |
| NNRTI      | DOR  | LR                 | K101E;G190C                      |
|            | EFV  | HR                 |                                  |
|            | ETR  | LR                 |                                  |
|            | NVP  | HR                 |                                  |
|            | RPV  | IR                 |                                  |
| INSTI      | BIC  | HR                 | G118R;E138K;R263K                |
|            | CAB  | HR                 |                                  |
|            | DTG  | HR                 |                                  |
|            | EVG  | HR                 |                                  |
|            | RAL  | HR                 |                                  |

## Appendix

### Drug abbreviations in full

| DRUG.CLASS   | ABBREVIATION | DRUG.NAME      |
|--------------|--------------|----------------|
| <b>PI</b>    | ATV          | Atazanavir     |
|              | DRV          | Darunavir      |
|              | FPV          | Fosamprenavir  |
|              | IDV          | Indinavir      |
|              | LPV          | Lopinavir      |
|              | NFV          | Nelfinavir     |
|              | SQV          | Saquinavir     |
|              | TPV          | Tipranavir     |
| <b>NRTI</b>  | ABC          | Abacavir       |
|              | AZT          | Azidothymidine |
|              | DFT          | Stavudine      |
|              | DDI          | Didanosine     |
|              | FTC          | Emtricitabine  |
|              | LMV          | Lamivudine     |
|              | TDF          | Tenofovir      |
| <b>NNRTI</b> | DOR          | Doravirine     |
|              | EFV          | Efavirenz      |
|              | ETR          | Etravirine     |
|              | NVP          | Nevirapine     |
|              | RPV          | Rilpivirine    |
| <b>INSTI</b> | BIC          | Bictegravir    |
|              | CAB          | Cabotegravir   |
|              | DTG          | Dolutegravir   |
|              | EVG          | Elvitegravir   |
|              | RAL          | Raltegravir    |

### Comments

| DRUG.CLASS | COMMENTS   |
|------------|--|
| <b>PI</b>  | I50V is a nonpolymorphic mutation selected by FPV, LPV and DRV. It reduces susceptibility to LPV and DRV.  |
|            | I54V is a non-polymorphic PI-selected mutation that contributes reduced susceptibility to each of the PIs except DRV.  |
|            | M46I/L are relatively non-polymorphic PI-selected mutations. In combination with other PI-resistance mutations, they are associated with reduced susceptibility to each of the PIs except DRV. |
|            | V82A is a non-polymorphic mutation selected primarily by IDV and LPV. It is associated with reduced susceptibility to LPV and to a lesser extent ATV. It increases DRV susceptibility.         |
|            |  |
|            | D67N is a non-polymorphic TAM associated with low-level resistance to AZT.   |
|            | D67G/E/S/T/H are non-polymorphic NRTI-selected mutations that generally occur in viruses with multiple TAMs.   |
|            | K219E/Q/N/R are accessory TAMS that usually occur in combination with multiple other TAMs.   |
|            | K70R is a TAM that confers intermediate resistance to AZT and contributes to reduced ABC and TDF susceptibility in combination with other TAMs.  |

|              |  |
|--------------|--|
| <b>NRTI</b>  | M184V/I cause high-level in vitro resistance to 3TC and FTC and low/intermediate resistance to ABC (3-fold reduced susceptibility). M184V/I are not contraindications to continued treatment with 3TC or FTC because they increase susceptibility to AZT and TDF and are associated with clinically significant reductions in HIV-1 replication. |
|              | T215Y/F are TAMs that causes intermediate/high-level resistance to AZT and potentially low-level resistance to ABC and TDF.  |
| <b>NNRTI</b> | G190C/T/V are rare non-polymorphic mutations that confer high-level resistance to NVP and EFV. Their effects on ETR, RPV, and DOR susceptibility are not known.  |
|              | K101E is a non-polymorphic accessory mutation that confers intermediate resistance to NVP and RPV and low-level reductions in susceptibility to EFV, ETR, and DOR when it occurs with other NNRTI-resistance mutations.  |
| <b>INSTI</b> |  |
|              | E138K/A/T are common nonpolymorphic accessory resistance mutations selected in patients receiving RAL, EVG, CAB, and DTG. Alone they do not reduce INSTI susceptibility. However, they contribute to reduced susceptibility in combination with other mutations particularly those at position 148.  |
|              | R263K is a nonpolymorphic mutation selected in vitro by EVG, DTG, BIC, and CAB. It occurs in a high proportion of persons who develop VF and emergent HIVDR while receiving DTG. Alone, it reduces DTG, BIC, and CAB susceptibility about 2-fold.  |