

**Table S1:** Details of previous and current antiretroviral therapy (ART) exposure of study participants.

|   | Total           | DTG+3TC        | DTG+PI          | DTG+RPV         | DTG+TDF/FTC     | DTG+TAF/FTC     | DTG+ABC/3TC    | P       |
|---|-----------------|----------------|-----------------|-----------------|-----------------|-----------------|----------------|---------|
|   | N=533           | N=120 (22.5%)  | N=38 (7.1%)     | N=67 (12.6%)    | N=49 (9.2%)     | N=27 (5.1%)     | N=232 (43.5%)  |         |
| <b>Time on ART (years), median (IQR)</b>                            | 10.6 (4.8-18.1) | 9.9 (4.9-15.5) | 18.1 (7.2-20.2) | 13.7 (7.0-21.8) | 11.2 (3.3-18.1) | 11.3 (5.7-17.7) | 9.2 (4.4-16.5) | 0.002   |
| <b>Drug classes in previous ART</b>                                 |                 |                |                 |                 |                 |                 |                |         |
| <b>NRTI</b>   | 507 (95.1)      | 118 (98.3)     | 36 (94.7)       | 63 (94.0)       | 221 (95.3)      | 43 (87.8)       | 26 (96.3)      | 0.89    |
| median months (IQR)   | 96 (48-176)     | 96 (51-157)    | 148 (80-210)    | 132 (64-208)    | 84 (44-166)     | 78 (42-160)     | 132 (64-199)   | 0.03    |
| <b>NNRTI</b>  | 318 (59.7)      | 64 (53.3)      | 24 (63.2)       | 54 (80.6)       | 136 (58.6)      | 23 (46.9)       | 17 (63.0)      | 0.002   |
| median months (IQR)   | 54 (28-119)     | 52 (38-121)    | 44 (22-72)      | 74 (40-130)     | 53 (26-97)      | 56 (16-150)     | 105 (36-155)   | 0.28    |
| <b>PI</b>   | 391 (73.4)      | 83 (69.2)      | 35 (92.1)       | 53 (79.1)       | 162 (69.8)      | 36 (73.5)       | 21 (77.8)      | 0.008   |
| median months (IQR)   | 70 (35-119)     | 69 (36-96)     | 98 (61-164)     | 79 (39-137)     | 64 (29-120)     | 79 (36-105)     | 30 (20-104)    | 0.02    |
| <b>INSTI</b>  | 14 (2.6)        | 5 (4.2)        | 0               | 8 (11.9)        | 0               | 0               | 0              | <0.0001 |
| median months (IQR)   | 39 (11-71)      | 29 (14-51)     | -               | 60 (27-90)      | -               | -               | -              | 0.31    |
| <b>Other</b>  | 204 (38.3)      | 58 (48.3)      | 20 (52.6)       | 38 (56.7)       | 66 (28.4)       | 11 (22.4)       | 11 (40.7)      | <0.0001 |
| median months (IQR)   | 32 (13-54)      | 26 (11-50)     | 39 (16-61)      | 44 (23-80)      | 21 (8-44)       | 44 (12-60)      | 64 (17-69)     | 0.005   |
| <b>Overall classes</b>  |                 |                |                 |                 |                 |                 |                |         |
| 2   | 209 (39.2)      | 48 (40.0)      | 8 (21.0)        | 12 (17.9)       | 108 (46.6)      | 23 (46.9)       | 10 (37.0)      |         |
| 3   | 204 (38.3)      | 52 (43.3)      | 13 (34.2)       | 22 (32.8)       | 91 (39.2)       | 17 (34.7)       | 9 (33.3)       |         |
| 4-5   | 99 (18.6)       | 19 (15.8)      | 15 (39.5)       | 30 (44.8)       | 24 (10.3)       | 4 (8.2)         | 7 (25.9)       |         |
| unclear   | 21 (3.9)        | 1 (0.8)        | 2 (5.3)         | 3 (4.5)         | 9 (3.9)         | 5 (10.2)        | 1 (3.7)        | <0.0001 |
| <b>Time on last regimen before enrolment (months), median (IQR)</b> | 30 (16-56)      | 28 (18-41)     | 24 (12-51)      | 30 (15-47)      | 34 (13-77)      | 24 (17-56)      | 32 (15-69)     | 0.92    |
| <b>PI on last regimen, n (%)</b>                                    | 248 (46.5)      | 53 (44.1)      | 30 (79.0)       | 20 (29.8)       | 25 (51.0)       | 12 (44.4)       | 108 (46.5)     | 0.0002  |
| ATV   | 109 (41.1)      | 27 (22.5)      | 7 (10.4)        | 7 (10.4)        | 8 (16.3)        | 6 (22.2)        | 57 (24.5)      | 0.08    |
| DRV   | 115 (46.4)      | 25 (20.8)      | 23 (60.5)       | 13 (19.4)       | 11 (22.4)       | 5 (18.5)        | 38 (16.3)      | <0.0001 |
| <b>INSTI on last regimen, n (%)</b>                                 | 103 (19.3)      | 23 (19.1)      | 14 (36.8)       | 18 (26.8)       | 5 (10.2)        | 6 (22.2)        | 37 (15.9)      | 0.01    |
| RAL   | 72 (13.5)       | 12(2.2)        | 13 (34.2)       | 16 (23.88)      | 5 (10.2)        | 4 (14.8)        | 22 (9.4)       | 0.0001  |
| EVG   | 31 (5.8)        | 11 (9.1)       | 1 (2.6)         | 2 (2.9)         | 0 (0.0)         | 2 (7.4)         | 15 (6.4)       | 0.19    |
| <b>NNRTI on last regimen, n (%)</b>                                 | 184 (34.5)      | 28 (23.3)      | 9 (23.7)        | 43 (64.1)       | 17 (34.6)       | 11 (40.7)       | 76 (32.7)      | <0.0001 |
| EFV   | 65 (12.2)       | 11 (9.1)       | 2 (7.1)         | 3 (4.4)         | 10 (20.4)       | 3 (11.1)        | 36 (15.5)      | 0.045   |
| RPV   | 62 (11.6)       | 10 (8.3)       | 4 (10.5)        | 23 (34.3)       | 3 (6.1)         | 5 (18.5)        | 17 (7.3)       | <0.0001 |
| NVP   | 41 (7.7)        | 5 (4.1)        | 2 (5.3)         | 11 (16.4)       | 3 (6.1)         | 2 (7.4)         | 18 (7.7)       | 0.08    |
| <b>NRTI on last regimen, n (%)</b>                                  | 440 (82.6)      | 106 (88.3)     | 20 (52.6)       | 40 (59.7)       | 42 (85.7)       | 26 (96.3)       | 206 (88.7)     | <0.0001 |
| TAF   | 61 (11.4)       | 26 (21.7)      | 2 (5.3)         | 6 (9.0)         | 0 (0.0)         | 13 (48.2)       | 14 (6.0)       | <0.0001 |
| TDF   | 160 (30.0)      | 21 (17.5)      | 14 (36.8)       | 15 (22.3)       | 36 (73.4)       | 8 (29.6)        | 66 (28.4)      | <0.0001 |
| FTC   | 217 (40.7)      | 45 (62.5)      | 14 (42.1)       | 21 (31.3)       | 35 (71.4)       | 21 (77.7)       | 79 (34.0)      | <0.0001 |
| ABC   | 174 (32.6)      | 25 (20.8)      | 4 (10.5)        | 14 (20.9)       | 3 (6.1)         | 2 (7.4)         | 126 (54.3)     | <0.0001 |
| 3TC   | 221 (41.4)      | 60 (50.0)      | 4 (10.5)        | 18 (26.8)       | 6 (12.2)        | 5 (18.5)        | 128 (55.1)     | <0.0001 |
| <b>Time on current regimen (months), median (IQR)</b>               | 27 (13-49)      | 20 (13-25)     | 48 (26-56)      | 21 (9-50)       | 51 (38-61)      | 11 (6-19)       | 39 (14-50)     | <0.0001 |