

**Annex 1:** study participant's demographic characteristics

| sample code | Accession no. | Gender | Age | Treatment regimen | line of ARV | log <sub>10</sub> copies/ml | HIV-1 subtypes |
|-------------|---------------|--------|-----|-------------------|-------------|-----------------------------|----------------|
| 248         | MT908050      | F      | 55  | TDF+3TC+DTG       | First       | 3.67                        | A1D            |
| 251         | MT908051      | F      | 14  | AZT+3TC+NVP       | First       | 4.01                        | A1             |
| 266         | MT908052      | F      | 35  | AZT+3TC+NVP       | First       | 4.13                        | A1A2           |
| 268         | MT908053      | M      | 51  | TDF+3TC+EFV       | First       | 4.07                        | A1             |
| 275         | MT908054      | M      | 36  | TDF+3TC+EFV       | First       | 4.75                        | A1D            |
| 301         | MT908055      | F      | 51  | TDF+3TC+DTG       | First       | 3.93                        | A1B            |
| 304         | MT908056      | F      | 15  | TDF+3TC+EFV       | First       | 4.61                        | D              |
| 309         | MT908057      | M      | 53  | TDF+3TC+EFV       | First       | 5.11                        | A1             |
| 311         | MT908058      | M      | 15  | AZT+3TC+NVP       | First       | 4.46                        | B              |
| 317         | MT908059      | F      | 10  | ABC+3TC+LPV/r     | Second      | 4.18                        | A1             |
| 319         | MT908060      | F      | 37  | TDF+3TC+EFV       | First       | 4.88                        | A1             |
| 321         | MT908061      | F      | 57  | TDF+3TC+DTG       | First       | 4.15                        | A1             |
| 326         | MT908062      | F      | 47  | AZT+3TC+NVP       | First       | 3.79                        | C              |
| 349         | MT908063      | F      | 46  | TDF+3TC+EFV       | First       | 5.11                        | D              |
| 352         | MT908064      | F      | 21  | AZT+3TC+ATV/r     | Second      | 4.91                        | A1             |
| 353         | MT908065      | M      | 19  | TDF+3TC+EFV       | First       | 4.23                        | A1             |
| 359         | MT908066      | F      | 26  | TDF+3TC+EFV       | First       | 4.99                        | D              |
| 361         | MT908067      | F      | 61  | TDF+3TC+DTG       | First       | 4.98                        | D              |
| 369         | MT908068      | F      | 42  | TDF+3TC+EFV       | First       | 3.69                        | G              |
| 386         | MT908069      | M      | 3   | ABC 3TC EFV       | First       | 4.68                        | D              |
| 387         | MT908070      | F      | 6   | ABC 3TC EFV       | First       | 3.77                        | A1             |
| 389         | MT908071      | M      | 56  | AZT 3TC NVP       | First       | 5.4                         | D              |
| 390         | MT908072      | M      | 53  | TDF 3TC ATV/r     | Second      | 3.91                        | A1             |
| 394         | MT908073      | F      | 42  | TDF 3TC EFV       | First       | 3.91                        | BD             |
| 402         | MT908074      | F      | 49  | AZT 3TC NVP       | First       | 3.74                        | A1             |
| 406         | MT908075      | M      | 9   | TDF 3TC EFV       | First       | 4.16                        | A1             |
| 411         | MT908076      | M      | 7   | ABC+3TC+LPV/r     | Second      | 4.92                        | A1             |
| 412         | MT908077      | M      | 41  | TDF+3TC+DTG       | First       | 4.55                        | D              |
| 414         | MT908078      | M      | 7   | ABC+3TC+EFV       | First       | 5.09                        | A1             |
| 425         | MT908079      | M      | 38  | TDF+3TC+EFV       | First       | 4.27                        | A1             |
| 428         | MT908080      | M      | 33  | AZT+3TC+NVP       | First       | 4.22                        | A1             |
| 451         | MT908081      | F      | 66  | TDF+3TC+EFV       | First       | 5.37                        | A1C            |
| 452         | MT908082      | F      | 8   | AZT+3TC+NVP       | First       | 3.89                        | A1             |
| 453         | MT908083      | F      | 34  | TDF+3TC+ATV/r     | Second      | 3.75                        | A1             |
| 455         | MT908084      | M      | 42  | TDF+3TC+EFV       | First       | 4.49                        | A1             |
| 456         | MT908085      | F      | 22  | TDF+3TC+EFV       | First       | 4.29                        | A1B            |
| 465         | MT908086      | M      | 1   | ABC+3TC+LPV/r     | Second      | 5.57                        | A1             |
| 467         | MT908087      | M      | 19  | AZT+3TC+ATV/r     | Second      | 5.53                        | A1             |
| 468         | MT908088      | F      | 21  | TDF+3TC+ATV/r     | Second      | 4.92                        | A1             |
| 474         | MT908089      | F      | 14  | TDF+3TC+EFV       | First       | 4.16                        | BC             |
| 477         | MT908090      | F      | 30  | TDF+3TC+ATV/r     | Second      | 4.32                        | A1             |
| 481         | MT908091      | M      | 46  | TDF+3TC+EFV       | First       | 5.47                        | D              |
| 486         | MT908092      | F      | 33  | TDF+3TC+EFV       | First       | 2.97                        | A1             |
| 523         | MT908093      | M      | 7   | ABC+3TC+EFV       | First       | 3.27                        | A1             |
| 531         | MT908094      | F      | 40  | AZT+3TC+ATV/r     | Second      | 4.17                        | A1             |
| 532         | MT908095      | F      | 4   | ABC+3TC+LPV/r     | Second      | 3.23                        | A1             |
| 538         | MT908096      | M      | 15  | TDF+3TC+EFV       | First       | 3.13                        | A1             |
| 549         | MT908097      | M      | 37  | TDF+3TC+EFV       | First       | 3.76                        | A1             |
| 550         | MT908098      | M      | 6   | ABC+3TC+EFV       | First       | 4.14                        | A1             |
| 551         | MT908099      | F      | 30  | TDF+3TC+EFV       | First       | 4.82                        | A1D            |
| 555         | MT908100      | M      | 65  | TDF+3TC+EFV       | First       | 6.05                        | A1             |
| 556         | MT908101      | F      | 13  | TDF+3TC+EFV       | First       | 4.19                        | A1             |
| 558         | MT908102      | M      | 50  | TDF+3TC+EFV       | First       | 5.99                        | A1             |

AZT, Zidovudine; NVP, Nevirapine; EFV, Efavirenz; TDF, Tenofovir; 3TC, Lamivudine; DTG, Dolutegravir; ATV/r, Atazanavir/r; LPV/r, Lopinavir/r; ARV, antiretroviral.