**Table S1.** Predictors for poor adherence (n=119) and being under-dosed (n=54) among children and adolescents from the Chronic Disease Clinic in Ifakara (CDCI).

|  |  |  |
| --- | --- | --- |
|  | Poor adherence | Under-dosage |
|  | Univariate | Multivariate | Univariate | Multivariate |
|  | OR | 95% CI | p | OR | 95% CI | p | OR | 95% CI | p | OR | 95% CI | p |
| Female sex | 0.66 | 0.29 – 1.48 | 0.311 | 0.75 | 0.18 – 3.04 | 0.684 | 0.44 | 0.14 – 1.38 | 0.158 | 0.78 | 0.17 – 3.56 | 0.743 |
| CD4+percentage per additional 10 percent | 0.75 | 0.49 – 1.16 | 0.200 | 1.32 | 0.60 – 2.90 | 0.494 | - | - | - | - | - | - |
| WHO clinical stage 3-4 at ART start | 1.79 | 0.76 – 4.21 | 0.186 | 1.49 | 0.40 – 5.57 | 0.554 | 0.45 | 0.13 – 1.52 | 0.199 | 0.24 | 0.05 – 1.25 | 0.091 |
| Age at ART start per additional year | 1.12 | 1.01 – 1.24  | 0.039 | 1.34 | 1.04 – 1.71 | 0.021 | 0.87 | 0.76 – 1.01 | 0.059 | 0.73 | 0.57 – 0.92 | 0.007 |
| BMI-for-age Z score1 | 1.12 | 0.81 – 1.56 | 0.497 | 0.98 | 0.58 – 1.65 | 0.943 | 0.82 | 0.54 – 1.25 | 0.343 | 0.90 | 0.50 – 1.61 | 0.711 |
| Initial ART regimen compared to d4T+3TC+NVPAZT+3TC+NVPAZT+3TC+EFV | 0.430.90 | 0.11 – 1.610.38 – 2.17 | 0.2080.821 | 0.132.90 | * 1. – 2.42

0.66 – 12.86 | 0.1690.161 | -- | -- | -- | -- | -- | -- |
| Current ART regimen compared to PI-basedTDF-based 1st-lineEFV-based 1st-lineNVP-based 1st-line | 1.561.301.06 | 0.38 – 6.470.37 – 4.580.31 – 3.58 | 0.5380.6850.928 | 5.482.393.43 | 0.47 – 64.640.29 – 19.990.40 – 29.52 | 0.1770.4210.262 | --- | --- | --- | --- | --- | --- |
| Vital status of parents compared to both aliveDouble orphanMaternal orphanPaternal orphan | 1.380.990.86 | 0.40 – 4.710.31 – 3.200.24 – 3.03 | 0.6080.9900.808 | 4.700.180.48 | 0.65 – 34.130.03 – 1.290.07 – 3.40 | 0.1260.0880.465 | --- | --- | --- | --- | --- | --- |
| ART stop or change due to drug stock-out | 0.64 | 0.23 – 1.79 | 0.397 | 0.60 | 0.11 – 3.20 | 0.547 | - | - | - | - | - | - |
| Number of ART switches2 | 1.14 | 1.01 – 1.28 | 0.028 | 1.58 | 1.20 – 2.07 | 0.001 | 1.21 | 1.00 – 1.47 | 0.048 | 1.53 | 1.12 – 2.08 | 0.008 |
| Distance to clinic3 | 1.00 | 0.99 – 1.01 | 0.976 | 0.99 | 0.97 – 1.01 | 0.439 | - | - | - | - | - | - |
| 1per each additional unit increase of the z-score2per each additional number of regimen switch3per each additional kilometre distance to the hospitalART: antiretroviral treatment; CTC: care and treatment centre; d4T: stavudine; 3TC: lamivudine; NVP: nevirapine; AZT: zidovudine; EFV: efavirenz, PI: protease inhibitor; NNRTI: non-nucleoside reverse transcriptase inhibitor; BMI: body mass index; CDCI: Chronic Disease Clinic Ifakara. |