**Supplementary information**

**Comparison of adherence measurement tools used in a pre-exposure prophylaxis demonstration study among female sex workers in Benin**

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Table 1. Relationship between the number of pills taken in the last week and the tenofovir (TFV) and emtricitabine (FTC) plasma concentrations

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **7 pills taken in the last week** | **4 pills taken in the last week** | **2 pills taken in the last week** | **1 pill taken in the last week** | **Below quantification limit** |
| **FTC concentration in ng/mL** | | ≥ 35.4 | 4.2-35.4 | 2.5-4.1 | 0.31-2.4 | <0.31 |
| **TFV concentration in ng/mL** | | ≥ 49.1 | 4.6-49. | 3.8-4.5 | 0.31-3.7 | <0.31 |

Table 2. Unweighted adherence based on tenofovir (TFV) or emtricitabine (FTC) plasma concentrations at the different study visits

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Adherence level based on TFV or FTC concentration** | | **D14\***  **(N=214)**  **N (%)** | **M6\***  **(N=150)**  **N (%)** | **M12**  **(N=124)**  **N (%)** | **M18**  **(N=51)**  **N (%)** | **M24**  **(N=30)**  **N (%)** | **Overall\***  **(N=569)** |
| **7 pills per week** | **TFV: ≥ 35.4 ng/mL** | 109 (50.9) | 48 (32.0) | 31 (25.0) | 11 (21.6) | 6 (20.0) | 205 (36.0) |
| **FTC: ≥ 49.1 ng/mL** | 110 (51.6) | 49 (32.9) | 33 (26.6) | 11 (21.6) | 6 (20.0) | 209 (36.8) |
| **4 pills per week** | **TFV :4.2-35.4 ng/mL** | 26 (12.1) | 15 (10.0) | 10 (8.0) | 1 (1.9) | 1 (3.3) | 53 (9.3) |
| **FTC: 4.6-49.0 ng/mL** | 27 (12.7) | 17 (11.4) | 11 (8.9) | 1 (1.9) | 2 (6.7) | 58 (10.2) |
| **2 pills per week** | **TFV: 2.5-4.1 ng/mL** | 3 (1.4) | 1 (0.7) | 2 (1.6) | 0 (0.0) | 1 (3.3) | 7 (1.2) |
| **FTC: 3.8-4.5 ng/mL** | 1 (0.8) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 1(0.2) |
| **1 pill per week** | **TFV: 0.31-2.4 ng/mL** | 16 (7.5) | 11 (7.33) | 6 (4.8) | 2 (3.9) | 0 (0.0) | 35 (6.1) |
| **FTC: 0.31-3.7 ng/mL** | 15 (7.0) | 6 (4.0) | 5 (4.0) | 3 (5.9) | 1 (3.3) | 30 (5.3) |
| **Below quantification level** | **TFV: <0.31 ng/mL** | 60 (28.0) | 75 (50.0) | 75 (60.5) | 37 (72.6) | 22 (73.3) | 269 (47.3) |
| **FTC: <0.31 ng/mL** | 60 (28.2) | 77 (51.7) | 75 (60.5) | 36 (70.6) | 21 (70.0) | 269 (47.4) |

TFV=tenofovir

FTC=emtricitabine

\* One missing data for FTC concentration at Day 14 (N=213) and at month 6 visit (N=149). Overall, for FTC, there was 2 missing data (N=567).