**Supplemental Table 1a. Pregnancy rates and rate ratios for overall effect of BMI or weight among women using implants for <6 months since first documentation of implant use**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Pregnancies/Person-Years** | **Pregnancy Rate\* (95% CI)** | **Crude IRR\*\* (95% CI)** | **Adjusted IRR\*\*\* (95% CI)** | ***p*-value** |
| **BMI (kg/cm2)** |  |  |  |  | 0.17 |
| Underweight | 21/437 | 4.8 (3.0, 7.3) | 1.4 (0.9, 2.3) | 1.4 (0.9, 2.2) |  |
| Normal weight | 95/2707 | 3.5 (2.8, 4.3) | Reference | Reference |  |
| Overweight | 10/535 | 1.9 (0.9, 3.4) | 0.5 (0.3, 1.0) | 0.6 (0.3, 1.1) |  |
| Obese | 4/120 | 3.3 (0.9, 8.5) | 0.9 (0.3, 2.4) | 1.1 (0.4, 2.9) |  |
| missing | 5/176 | 2.8 (0.9, 6.6) | -- | -- |  |
| **Weight (kg)** |  |  |  |  | 0.13 |
| <70 | 128/3565 | 3.6 (3.0, 4.3) | Reference | Reference |  |
| ≥70 | 7/410 | 1.7 (0.7, 3.5) | 0.5 (0.2, 1.0) | 0.5 (0.3, 1.2) |  |
| **Weight (kg)** |  |  |  |  | 0.47 |
| <50 | 22/630 | 3.5 (2.2, 5.3) | 0.9 (0.6, 1.5) | 0.9 (0.6, 1.5) |  |
| 50-59 | 65/1759 | 3.7 (2.9, 4.7) | Reference | Reference |  |
| 60-69 | 41/1176 | 3.5 (2.5, 4.7) | 0.9 (0.6, 1.4) | 1.0 (0.7, 1.5) |  |
| ≥70 | 7/410 | 1.7 (0.7, 3.5) | 0.5 (0.2, 1.0) | 0.5 (0.2, 1.2) |  |

BMI categories are: Underweight, BMI < 18.5; Normal weight, 18.5-24.9; Overweight, 25-29.9; Obese, ≥30.

\*Per 100 woman-years.

\*\*All crude models included BMI or weight categories and program (AMPATH or FACES).

\*\*\*All adjusted models included the BMI or weight categories and the following covariates: average age during observation period (categorized into 5-year intervals), marital status, number of living children, education level, CD4 cell count, WHO clinical stage, use of anti-TB medications, calendar time, and program (AMPATH or FACES).

**Supplemental Table 1b. Pregnancy rates and rate ratios for overall effect of BMI or weight among women using implants for 6 months since first documentation of implant use**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Pregnancies/Person-Years** | **Pregnancy Rate\* (95% CI)** | **Crude IRR\*\* (95% CI)** | **Adjusted IRR\*\*\* (95% CI)** | ***p*-value** |
| **BMI (kg/cm2)** |  |  |  |  | 0.84 |
| Underweight | 36/801 | 4.5 (3.1, 6.2) | 0.9 (0.7, 1.3) | 1.0 (0.7, 1.4) |  |
| Normal weight | 233/4948 | 4.7 (4.1, 5.3) | Reference | Reference |  |
| Overweight | 41/1137 | 3.6 (2.6, 5.0) | 0.7 (0.5, 1.0) | 0.9 (0.6, 1.2) |  |
| Obese | 9/236 | 3.8 (1.7, 7.2) | 0.8 (0.4, 1.5) | 1.0 (0.5, 1.9) |  |
| missing | 6/189 | 3.2 (1.1, 6.9) | -- | -- |  |
| **Weight (kg)** |  |  |  |  | 0.67 |
| <70 | 297/6508 | 4.6 (4.1, 5.1) | Reference | Reference |  |
| ≥70 | 27/803 | 3.4 (2.2, 5.0) | 0.7 (0.5, 1.1) | 0.9 (0.6, 1.4) |  |
| **Weight (kg)** |  |  |  |  | 0.63 |
| <50 | 58/1136 | 5.1 (3.9, 6.6) | 1.1 (0.8, 1.6) | 1.1 (0.8, 1.5) |  |
| 50-59 | 137/3160 | 4.3 (3.6, 5.1) | Reference | Reference |  |
| 60-69 | 103/2211 | 4.7 (3.8, 5.6) | 1.1 (0.8, 1.4) | 1.2 (0.9, 1.5) |  |
| ≥70 | 27/803 | 3.4 (2.2, 5.0) | 0.8 (0.5, 1.2) | 1.0 (0.6, 1.5) |  |

BMI categories are: Underweight, BMI < 18.5; Normal weight, 18.5-24.9; Overweight, 25-29.9; Obese, ≥30.

\*Per 100 woman-years.

\*\*All crude models included BMI or weight categories and program (AMPATH or FACES).

\*\*\*All adjusted models included the BMI or weight categories and the following covariates: average age during observation period (categorized into 5-year intervals), marital status, number of living children, education level, CD4 cell count, WHO clinical stage, use of anti-TB medications, calendar time, and program (AMPATH or FACES).

**Supplemental Table 2a: Pregnancy rates and rate ratios for ART group by BMI or weight among women using implants <6 months since first documentation of implant use**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Nevirapine-based ART**  **(reference group)** | | **Efavirenz-based ART** | | | | | | **No ART use** | | | | | |
|  | **Pregnancies/Woman-Years** | **Pregnancy Rate\* (95% CI)** | **Pregnancies/Woman-Years** | **Pregnancy Rate\* (95% CI)** | **Crude IRR\*\* (95% CI)** | **Adjusted IRR\*\*\* (95% CI)** | ***p* for interaction term or ratio of adjusted IRRs (95% CI)†** |  | **Pregnancies/Woman-Years** | **Pregnancy Rate\* (95% CI)** | **Crude IRR\*\* (95% CI)** | **Adjusted IRR\*\*\* (95% CI)** | ***p* for interaction term or ratio of adjusted IRRs (95% CI)††** |  |
| **Overall** | 40/1790 | 2.2 (1.6, 3.0) | 49/1225 | 4.0 3.0, 5.3) | 1.9 (1.2, 2.9) | 1.5 (0.9, 2.4) |  |  | 46/960 | 4.8 (3.5, 6.4) | 2.1 (1.4, 3.2) | 1.9 (1.2, 3.1) |  |  |
| **BMI (kg/cm2)** |  |  |  |  |  |  | 0.48 |  |  |  |  | 0.54 |
| Underweight | 6/189 | 3.2 (1.2, 6.9) | 9/162 | 5.6 (2.5, 10.6) | 1.7 (0.6, 4.7) | 1.4 (0.5, 4.0) | 1.1 (0.3, 3.3) | 6/86 | 7.0 (2.6, 15.2) | 2.1 (0.7, 6.3) | 1.8 (0.6, 5.8) | 1.0 (0.3, 3.4) |
| Normal weight | 30/1232 | 2.4 (1.6, 3.5) | 32/817 | 3.9 (2.7, 5.5) | 1.7 (1.0, 2.8) | 1.3 (0.8, 2.3) | Ref. | 33/658 | 5.0 (3.5, 7.0) | 2.1 (1.3, 3.4) | 1.8 (1.1, 3.1) | Ref. |
| Overweight | 1/253 | 0.4 (0.0, 2.2) | 5/142 | 3.5 (1.1, 8.2) | 9.1 (1.1, 78.7) | 7.2 (0.8, 62.5) | 5.4 (0.6, 49.2) | 4/140 | 2.9 (0.8, 7.3) | 7.7 (0.9, 68.7) | 7.1 (0.8, 64.0) | 3.9 (0.4, 36.4) |
| Obese | 2/54 | 3.7 (0.4, 13.4) | 1/28 | 3.6 (0.1, 20.2) | 1.0 (0.1, 11.5) | 0.8 (0.1, 9.2) | 0.6 (0.1, 7.2) | 1/39 | 2.6 (0.1, 14.3) | 1.0 (0.1, 7.5) | 0.7 (0.1, 7.2) | 0.4 (0.0, 4.1) |
| missing | 1/62 | 1.6 (0.0, 9.0) | 2/77 | 2.6 (0.3, 9.4) | -- | -- |  | 2/37 | 5.4 (0.7, 19.5) | -- | -- |  |
| **Weight (kg)** |  |  |  |  |  |  | 0.95 |  |  |  |  | 0.85 |
| <70 | 38/1603 | 2.4 (1.7, 3.3) | 47/1114 | 4.2 (3.1, 5.6) | 1.9 (1.2, 2.9) | 1.5 (0.9, 2.4) | Ref. | 43/848 | 5.1 (3.7, 6.8) | 2.1 (1.4, 3.2) | 1.9 (1.2, 3.1) | Ref. |
| ≥70 | 2/187 | 1.1 (0.1, 3.9) | 2/110 | 1.8 (0.2, 6.5) | 1.7 (0.2, 12.4) | 1.4 (0.2, 9.8) | 0.9 (0.1, 7.0) | 3/112 | 2.7 (0.6, 7.8) | 2.5 (0.4, 14.7) | 2.3 (0.4, 13.7) | 1.2 (0.2, 7.4) |
| **Weight (kg)** |  |  |  |  |  |  | 0.78 |  |  |  |  | 0.97 |
| <50 | 7/267 | 2.6 (1.1, 5.4) | 7/222 | 3.2 (1.3, 6.5) | 1.2 (0.4, 3.6) | 1.0 (0.3, 3.0) | 0.6 (0.2, 1.9) | 8/142 | 5.6 (2.4, 11.1) | 2.1 (0.8, 5.7) | 1.8 (0.7, 5.2) | 1.1 (0.3, 3.5) |
| 50-59 | 18/782 | 2.3 (1.4, 3.6) | 28/557 | 5.0 (3.3, 7.3) | 2.3 (1.2, 4.2) | 1.8 (1.0, 3.4) | Ref. | 19/420 | 4.5 (2.7, 7.1) | 1.9 (1.0, 3.7) | 1.7 (0.9, 3.4) | Ref. |
| 60-69 | 13/554 | 2.3 (1.2, 4.0) | 12/336 | 3.6 (1.8, 6.2) | 1.6 (0.7, 3.5) | 1.3 (0.6, 2.9) | 0.7 (0.3, 1.9) | 16/286 | 5.6 (3.2, 9.1) | 2.4 (1.1, 4.9) | 2.2 (1.0, 4.7) | 1.3 (0.5, 3.4) |
| ≥70 | 2/187 | 1.1 (0.1, 3.9) | 2/110 | 1.8 (0.2, 6.5) | 1.7 (0.2, 12.4) | 1.4 (0.2, 9.8) | 0.8 (0.1, 5.9) | 3/112 | 2.7 (0.6, 7.8) | 2.5 (0.4, 14.7) | 2.3 (0.4, 13.7) | 1.3 (0.2, 8.7) |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

BMI categories are: Underweight, BMI < 18.5; Normal weight, 18.5-24.9; Overweight, 25-29.9; Obese, ≥30.

\*Per 100 woman-years.

\*\*All crude models included the BMI or weight categories, ART group, an interaction term between BMI or weight and ART group, and program (AMPATH or FACES).

\*\*\* All adjusted models included the BMI or weight categories and the following covariates: average age during observation period (categorized into 5-year intervals), marital status, number of living children, education level, CD4 cell count, WHO clinical stage, use of anti-TB medications, calendar time, and program (AMPATH or FACES).

† = *p*-value for interaction term between ART group and BMI or weight, which tests whether the effect of efavirenz-based ART group, vs. nevirapine-based ART group as reference group, on pregnancy differs by BMI or weight.

†† = *p*-value for interaction term between ART group and BMI or weight, which tests whether the effect of no ART use group, vs. nevirapine-based ART group as reference group, on pregnancy differs by BMI or weight.

**Supplemental Table 2b: Pregnancy rates and rate ratios for ART group by BMI or weight among women using implants 6 months since first documentation of implant use**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Nevirapine-based ART**  **(reference group)** | | **Efavirenz-based ART** | | | | | **No ART use** | | | | | | |
|  | **Pregnancies/Woman-Years** | **Pregnancy Rate\* (95% CI)** | **Pregnancies/Woman-Years** | **Pregnancy Rate\* (95% CI)** | **Crude IRR\*\* (95% CI)** | **Adjusted IRR\*\*\* (95% CI)** | ***p* for interaction term or ratio of adjusted IRRs (95% CI)†** | **Pregnancies/Woman-Years** | **Pregnancy Rate\* (95% CI)** | **Crude IRR\*\* (95% CI)** | **Adjusted IRR\*\*\* (95% CI)** | ***p* for interaction term or ratio of adjusted IRRs (95% CI)††** |  |
| **Overall** | 113/3861 | 2.9 (2.4, 3.5) | 147/2046 | 7.2 (6.1, 8.4) | 2.7 (2.1, 3.5) | 2.4 (1.9, 3.1) |  | 64/1404 | 4.6 (3.5, 5.8) | 1.5 (1.1, 2.1) | 1.2 (0.8, 1.6) |  |  |
| **BMI (kg/cm2)** |  |  |  |  |  |  | 0.95 |  |  |  |  | 0.52 |
| Underweight | 12/419 | 2.9 (1.5, 5.0) | 16/275 | 5.8 (3.3, 9.5) | 2.4 (1.1, 4.9) | 2.4 (1.1, 5.0) | 1.0 (0.5, 2.2) | 8/107 | 7.5 (3.2, 14.7) | 2.7 (1.1, 6.5) | 2.1 (0.9, 5.0) | 2.0 (0.8, 5.1) |
| Normal weight | 86/2659 | 3.2 (2.6, 4.0) | 105/1348 | 7.8 (6.4, 9.4) | 2.7 (2.1, 3.6) | 2.4 (1.8, 3.2) | Reference | 42/941 | 4.5 (3.2, 6.0) | 1.4 (1.0, 2.1) | 1.0 (0.7, 1.6) | Reference |
| Overweight | 13/592 | 2.2 (1.2, 3.8) | 18/282 | 6.4 (3.8, 10.1) | 3.1 (1.5, 6.4) | 2.9 (1.4, 6.0) | 1.2 (0.6, 2.7) | 10/263 | 3.8 (1.8, 7.0) | 1.7 (0.8, 4.0) | 1.3 (0.6, 2.9) | 1.2 (0.5, 3.0) |
| Obese | 3/118 | 2.5 (0.5, 7.4) | 4/52 | 7.7 (2.1, 19.7) | 3.2 (0.7, 14.2) | 3.0 (0.7, 13.2) | 1.3 (0.3, 5.8) | 2/66 | 3.0 (0.4, 10.9) | 1.2 (0.2, 6.8) | 1.0 (0.2, 5.2) | 0.9 (0.2, 5.2) |
| missing | 0/73 | -- | 4/90 | 4.5 (1.2, 11.4) | -- | -- |  | 2/26 | 7.6 (0.9, 27.4) | -- | -- |  |
| **Weight (kg)** |  |  |  |  |  |  | 0.95 |  |  |  |  | 0.18 |
| <70 | 102/3445 | 3.0 (2.4, 3.6) | 134/1842 | 7.3 (6.1, 8.6) | 2.7 (2.1, 3.6) | 2.4 (1.9, 3.2) | reference | 61/1220 | 5.0 (3.8, 6.4) | 1.7 (1.2, 2.3) | 1.2 (0.9, 1.7) | reference |
| ≥70 | 11/416 | 2.6 (1.3, 4.7) | 13/203 | 6.4 (3.4, 10.9) | 2.6 (1.2, 5.8) | 2.5 (1.1, 5.6) | 1.0 (0.4, 2.4) | 3/184 | 1.6 (0.3, 4.8) | 0.6 (0.2, 2.2) | 0.5 (0.1, 1.8) | 0.4 (0.1, 1.5) |
| **Weight (kg)** |  |  |  |  |  |  | 0.58 |  |  |  |  | 0.40 |
| <50 | 19/569 | 3.3 (2.0, 5.2) | 26/377 | 6.9 (4.5, 10.1) | 2.3 (1.3, 4.1) | 2.1 (1.2, 3.7) | 1.0 (0.5, 1.9) | 13/189 | 6.9 (3.6, 11.7) | 2.0 (1.0, 4.0) | 1.5 (0.8, 3.0) | 1.5 (0.6, 3.3) |
| 50-59 | 52/1677 | 3.0 (2.3, 4.0) | 59/890 | 6.6 (5.0, 8.6) | 2.5 (1.7, 3.6) | 2.1 (1.5, 3.1) | Reference | 26/594 | 4.4 (2.9, 6.4) | 1.5 (0.9, 2.3) | 1.0 (0.6, 1.7) | Reference |
| 60-69 | 32/1198 | 2.7 (1.8, 3.8) | 49/576 | 8.5 (6.3, 11.3) | 3.5 (2.2, 5.5) | 3.1 (2.0, 5.0) | 1.5 (0.8, 2.7) | 22/437 | 5.0 (3.2, 7.6) | 1.9 (1.1, 3.2) | 1.4 (0.8, 2.5) | 1.4 (0.7, 2.8) |
| ≥70 | 11/416 | 2.6 (1.3, 4.7) | 13/203 | 6.4 (3.4, 10.9) | 2.6 (1.2, 5.8) | 2.5 (1.1, 5.6) | 1.2 (0.5, 2.8) | 3/184 | 1.6 (0.3, 4.8) | 0.6 (0.2, 2.2) | 0.5 (0.1, 1.8) | 0.5 (0.1, 1.9) |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |

BMI categories are: Underweight, BMI < 18.5; Normal weight, 18.5-24.9; Overweight, 25-29.9; Obese, ≥30.

\*Per 100 woman-years.

\*\*All crude models included the BMI or weight categories, ART group, an interaction term between BMI or weight and ART group, and program (AMPATH or FACES).

\*\*\* All adjusted models included the BMI or weight categories and the following covariates: average age during observation period (categorized into 5-year intervals), marital status, number of living children, education level, CD4 cell count, WHO clinical stage, use of anti-TB medications, calendar time, and program (AMPATH or FACES).

† = *p*-value for interaction term between ART group and BMI or weight, which tests whether the effect of efavirenz-based ART group, vs. nevirapine-based ART group as reference group, on pregnancy differs by BMI or weight.

†† = *p*-value for interaction term between ART group and BMI or weight, which tests whether the effect of no ART use group, vs. nevirapine-based ART group as reference group, on pregnancy differs by BMI or weight.