SUPPLEMENTAL TABLES AND FIGURES

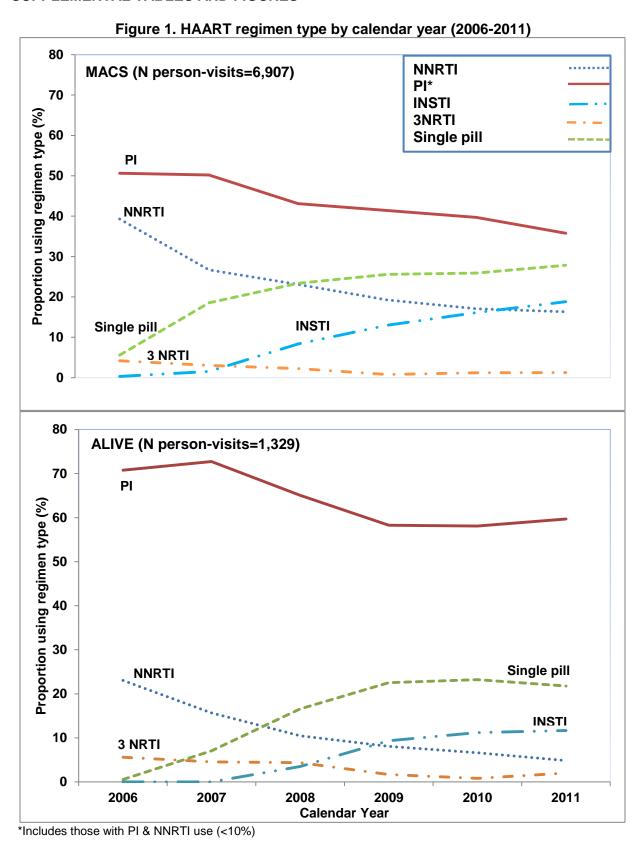


Table 1. Study Population Characteristics (2001-2011): comparing everyone against those seen since 2009

| Characteristics | MACS | | | | ALIVE | |
|--|---|---|---------|--|--|---------|
| | All person-visits (Person- visits=11,678, N=1,194) (%) | Those seen since 2009 (Person-visits=10,971, N=1,006) (%) | P-value | All person-visits (Person- visits=2,188, N=337) (%) | Those seen since 2009 (Person- visits=1,745, N=197) (%) | P-value |
| Age, mean (SD) | 49.1 (8.8) | 49.2 (8.6) | 0.26 | 49.4 (6.4) | 49.8 (6.5) | 0.05 |
| Race | | | | | | |
| Black | 25.8 | 25.8 | 1.0 | 95.7 | 96.0 | 0.64 |
| Sex | 1 | 00 | | | | |
| Male | Į, | 00 | - | 67.7 | 67.8 | 0.94 |
| Income | | | | | | |
| ≤\$10,000 | 20.9 | 20.5 | 0.46 | 90.9 | 89.3 | 0.09 |
| >\$10,000 | 79.1 | 79.5 | | 9.1 | 10.7 | |
| Insurance status | | | | | | |
| Private | 64.8 | 65.6 | 0.26 | 7.0 | 7.9 | 0.28 |
| Public | 43.3 | 42.9 | 0.56 | 79.1 | 78.1 | 0.47 |
| None | 7.0 | 6.9 | 0.76 | 5.6 | 5.2 | 0.61 |
| Current smoking [#] | 31.0 | 30.5 | 0.41 | 75.8 | 76.0 | 0.88 |
| Alcohol consumption ^{&} | 13.7 | 13.7 | 1.0 | 33.2 | 34.0 | 0.60 |
| Current injection drug use | 1.8 | 1.7 | 0.57 | 20.5 | 19.0 | 0.24 |
| Non-injecting recreational drug use | 48.1 | 47.8 | 0.65 | 18.5 | 18.7 | 0.87 |
| CD4 count at visit (cells/mm ³), mean (SD) | 580.3 (279.6) | 590.6 (277.0) | <0.05 | 361.5 (247.0) | 375.5 (240.4) | 0.25 |
| Viral load suppression | 78.3 | 79.9 | < 0.05 | 59.0 | 65.6 | < 0.01 |
| Depression status^ | 21.3 | 20.9 | 0.46 | 30.3* | 29.9* | 0.82 |
| Adherence %, mean (SD) | 96.7 (11.5) | 96.8 (11.4) | 0.51 | 96.3 (12.3) | 96.5 (12.1) | 0.62 |

*Current smoking (including occasional smoking); *MACS: moderate-to-heavy consumption, ALIVE: drank >1 day/week; ^ CES-D (≥16) *2006-2011

Table 2. Odds Ratios for viral load suppression at different adherence levels in the MACS (2006-2011)

| Model | <25% | Between 25% and 49% | Between 50% and 74% | Between 75% and 79% | Between 80% and 84% | Between 85% and 89% | Between 90% and 94% |
|-----------|--------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Crude | 0.05 | 0.15 | 0.43 | 0.74 | 1.35 | 1.40 | 0.91 |
| | (0.02, | (0.05, | (0.23, | (0.47, | (0.58, | (0.62, | (0.42, |
| | 0.17) | 0.46) | 0.81) | 1.17) | 3.13) | 3.16) | 1.96) |
| Adjusted* | 0.06 | 0.15 | 0.47 | 0.82 | 1.43 | 1.26 | 0.92 |
| | (0.02, | (0.05, | (0.25, | (0.52, | (0.61, | (0.56, | (0.43, |
| | 0.18) | 0.45) | 0.89) | 1.30) | 3.33) | 2.84) | 1.98) |

^{*}Adjusted for age, race, type of HAART, non-injection drug use, alcohol use, smoking, and CD4 count from previous visit

Table 3. Odds Ratios for viral load suppression at different adherence levels in the ALIVE study (2006-2011)

| Model | Adherence <50% | Adherence between 50% & 74% | Adherence between 75% & 94% |
|-----------|-------------------|-----------------------------|-----------------------------|
| Crude | 0.26 (0.08, 0.89) | 0.49 (0.22, 1.06) | 0.80 (0.34, 1,88) |
| Adjusted* | 0.33 (0.10, 1.10) | 0.56 (0.26, 1.23) | 0.76 (0.32, 1.78) |

^{*}Adjusted for age, sex, injection drug use, alcohol use, smoking, CD4 count from previous visit, non-injection drug use, and type of HAART

FIGURE CAPTIONS

Figure 1. Proportion reporting ≥95% adherence over time in the MACS and ALIVE study (2001-2011). The red dashed and blue solid lines represent the trends in reporting ≥95% adherence among all persons using HAART, and those seen since 2009, respectively. The thin black line represents the best fit line for those seen since 2009. The error bars represent 95% confidence intervals (CI) for observed proportions for those seen since 2009.

Figure 2. Proportion suppressing HIV RNA (<50 copies/mL) over time among participants with <95% adherence in the MACS and ALIVE study from 2001-2011. The blue thick line represents the observed proportion suppressed, and the black thin line represents the best fit line. The error bars represent 95% CI for the observed proportions.

Figure 3. Proportion suppressing HIV RNA (<50 copies/mL) by HAART adherence category (2006-2011). The blue thick line represents the observed proportions, and the black thin line represents the best fit line. The error bars represent 95% CI for the observed proportions. The odds ratios and 95% CI were obtained from a random-effects logistic regression model comparing the HIV RNA suppression at lower adherence levels to adherence ≥95%, and adjusting for confounders. In the MACS, confounders were age, race, alcohol use, non-injection drug use, smoking, type of HAART, and CD4 count from previous visit. In the ALIVE study, confounders were age, injection drug use, alcohol use, smoking, CD4 count from previous visit, non-injection drug use, and type of HAART.

Supplemental Figure 1. HAART regimen type by calendar year (2006-2011). The HAART regimens can be identified as follows: ——red line for PI (includes those with PI & NNRTI use (<10%)), ——dark blue line for NNRTI, — · · · light blue line for INSTI, — · · orange line for 3 NRTI, and —— green line for single pill.