

**Mannheimer S**, Harlem Hospital, Columbia University, New York, NY; **Thackeray L**, University of Minnesota, Minneapolis, MN; **Huppler Hullsiek K**, University of Minnesota, Minneapolis, MN; **Chesney M**, National Center for Complementary & Alternative Medicine, National Institutes of Health, Bethesda, MD; **Gardner E**, Denver Public Health, University of Colorado, Denver, CO; **Wu A**, Departments of Epidemiology and Medicine, Johns Hopkins University, Baltimore, MD; **Telzak E**, Department of Medicine and Department of Epidemiology & Population Health, Albert Einstein College of Medicine, and Bronx-Lebanon Hospital Center, New York, NY; **Lawrence J**, University of California at San Francisco, San Francisco, CA; **Baxter J**, Cooper University Hospital, University of Medicine and Dentistry of New Jersey, Camden, NJ; and **Friedland G**, Yale School of Medicine, Yale New Haven Hospital, Yale University, New Haven, CT; for the **Terry Beirn Community Program for Clinical Research on AIDS**

## **A Randomized Comparison of Two Instruments for Assessing Self-Reported Antiretroviral Adherence**

**Background:** We compared 2 instruments for assessing self-reported antiretroviral therapy (ART) adherence among HIV-infected patients with extensive ART experience and resistance, to assess whether the tools detect similar levels of adherence and if measured adherence predicted HIV RNA and CD4 outcomes.

**Methods:** Patients were randomized to complete either 3-day or 7-day adherence forms at 6 time points after initiating salvage ART. 3-day forms asked number of ART doses missed on each of the past 3 days; 7-day forms asked for a general assessment of amount of ART pills taken over the past week (all, most, about half, few, or none). Adherence was assessed as: 1) adherence to all drugs at each visit and 2) consistent adherence reported at *all* visits. Adherence levels were categorized as 100% or <100%. Groups were compared for distribution of adherence scores and changes in HIV RNA and CD4 from baseline.

**Results:** Most baseline patient characteristics were similar in the two groups (N=134; 64 in 3-day, 70 in 7-day): mean age 44 yrs; 10% women, 53% non-white, mean CD4 = 178 cells/mm<sup>3</sup>; HIV RNA (log<sub>10</sub> copies/ml) = 4.8 for 3-day, 5.1 for 7-day (p=0.001). A higher proportion of patients reported 100% adherence at each visit on 3-day vs. 7-day forms (significant at mo. 5: 84% vs. 67%; p = 0.03) and consistent 100% adherence through 5 months (53% vs. 36%, p=0.04) and through 8 mos. (32% vs. 17%, p=0.04). Changes in HIV RNA and CD4 cell count did not differ between 3- or 7-day groups by adherence at one visit or overall. 100% adherence as reported by both instruments was associated with greater HIV RNA declines (vs. < 100%).

**Conclusions:** A greater proportion of the 3-day self-report group reported 100% adherence. However, no differences in correlation with HIV RNA and CD4 measures were seen between groups. 100% adherence by either instrument was associated with better virologic outcomes. The 7-day self-report provides an alternative to the 3-day adherence self report.