Effect of Influenza Vaccination on HIV RNA
(ICAAC abstract I-49)

Twenty-five HIV-infected individuals were randomized to receive the Connaught whole virion influenza vaccine (n=9), the Connaught subvirion influenza vaccine (n=10), or a saline control (n=6). The baseline median CD4 count was 162 cells (range 1-788); the median viral load was 1750 copies/ml by RT-PCR (range 20-191,600). All but four individuals were receiving antiretroviral therapy. Viral load was determined at 1, 2, 5, 7, 14, 21, 28 and 60 days.

Results. The influenza vaccine was associated with a >3 fold increase in plasma viral load in 42% (8) of the vaccinated individuals. The increase was transient, occurred at a median of 21 days, and was of "limited magnitude" (maximum 8-fold increase over baseline). Five of the individuals with a rise in viral load received the subvirion flu vaccine and 3 received the whole virion flu vaccine. Seven out of 19 vaccinated individuals had a >4 fold increase in antibody titer to the flu vaccine. Investigators reported there was a positive association between response to flu vaccine and rise in viral load. Viral load increases occurred even in persons on regimens containing a protease inhibitor. Authors said the clinical significance of the "burst" in viral load during immune stimulation requires further investigation.