

## **ABSTRACT**

### **BACKGROUND:**

HIV treatment programs in Africa typically approach all enrolling patients uniformly. Growing numbers of patients are antiretroviral experienced. Defining patients on the basis of antiretroviral experience may inform enrollment practices, particularly if medical outcomes differ.

### **METHODS:**

Baseline and follow-up measures (CD4, weight change, and survival) were compared in a retrospective analysis between antiretroviral-naïve (ARV-N) and antiretroviral experience (ARV-E) patients enrolled at the Coptic Hope Center for Infectious Diseases in Nairobi, Kenya and followed between January 2004 and August 2006.

### **RESULTS:**

1,307 ARV-N and 962 ARV-E patients receiving highly active antiretroviral therapy (HAART) were followed for median of 9 months (interquartile range: 4-16 months). Compared to ARV-N, ARV-E had substantially higher CD4 count (median cells/mm<sup>3</sup>, 193 versus 95,  $P < 0.001$ ) and weight (median kg, 62 versus 57,  $P < 0.001$ ) at baseline, and lower rates of change in CD4 (-9.2 cells/mm<sup>3</sup>/month; 95% CI, -11.4 -7.0) and weight (-0.24 kg/month; 95% CI, -0.35 - -0.14) over 12 months. Mortality was significantly higher in ARV-N than ARV-E ( $P = 0.001$ ).

### **CONCLUSIONS:**

ARV-E patients form a growing group that differs significantly from ARV-N patients and requires a distinct approach from ARV-N clients. Systematic approaches to streamline care of ARV-E patients may allow focused attention on early ARV-N clients whose mortality risks are substantially higher.