

Background: The number of older Americans living with HIV is increasing. Currently approximately 10% of Americans living with HIV are at least 50 years old.¹ It is anticipated that this number will increase as older patients are more frequently leading active sex lives, potentially leading to an increase in new infections in this population. In addition, advancements in the therapy for HIV, has extended the longevity of HIV patients from 8 years in the era of zidovudine monotherapy to an estimated 20 years in the Highly Active Antiretroviral Therapy (HAART) era.^{2,3,4} The increased longevity and improved quality of life in patients receiving HAART are not without consequence. As the clinical experience with HAART increases, more information becomes available on the long-term toxicities of HAART. Adverse drug reactions (ADRs) secondary to HAART are relatively common and recognizable and knowledge of such is of increasing importance with the now chronic nature of HIV infection.^{5,6} It is theorized that older patients living with HIV will experience a relatively higher rate of ADRs. This risk may be secondary to age-related increased frequency of concomitant conditions such as diabetes and cardiovascular disease, the natural decline of renal and hepatic function occurring with advanced age (leading to decreased drug metabolism and elimination), and the cumulative toxicity from HAART after prolonged exposure. Drug toxicity has an impact on the patients' adherence to their HAART regimen, which can contribute to virologic failure and poor outcomes.⁷ To date there is little data available evaluating the incidence and severity of adverse drug reactions in older patients receiving HAART.

The proposed study is a prospective, descriptive-comparative study designed to compare rates of adverse drug reactions in older and younger patients receiving HAART at The Louis Stokes Veterans Affairs Medical Center, Outpatient HIV Clinic in Cleveland, OH. Approximately one-half of the clinic population is fifty or older. The specific aims are to compare the incidence and severity of ADRs secondary to HAART in patients over fifty years old to patients under fifty years old within our outpatient clinic population, compare the rates of concomitant comorbid conditions in older and younger HIV positive patients, and determine if any specific antiretrovirals or a particular antiretroviral drug class poses an increased risk for adverse drug reactions.