

## **Abstract**

### ***INTRODUCTION:***

Genital ulcer disease (GUD) is common in HIV-1-infected women, and a small number of studies have suggested increased GUD risk after antiretroviral therapy (ART) initiation. To better define this risk, we monitored 134 women at ART initiation and monthly thereafter.

### ***METHODS:***

Women were evaluated monthly for genital ulcers. Syphilis serology was tested quarterly, and chancroid culture was performed on ulcers that were felt to be clinically consistent with a diagnosis of chancroid. A logistic model with generalized estimating equations was used to analyze predictors of GUD from baseline until 6 months after ART initiation.

### ***RESULTS:***

During the study period, GUD occurred in 54 women (40.3%) at 85 visits (10.0%). GUD prevalence was 9.7% at baseline, increased to 16.7% at month 1 [adjusted odds ratio (aOR) 1.9 (1.0-3.6),  $P = 0.04$ ], then decreased to 6.4% by month 6. History of GUD [aOR 3.8 (1.9-7.7),  $P < 0.001$ ] and CD4 count  $<100$  [aOR 1.8 (1.0-3.4),  $P = 0.06$ ] were associated with increased risk of GUD after ART initiation.

### ***DISCUSSION:***

Women experience increased risk of GUD in the first month after ART initiation, particularly if they have low CD4 counts or a history of GUD.