

## **A Prospective Cohort Study Comparing the Effect of Single-Dose 2 g Metronidazole on Trichomonas vaginalis Infection in HIV-Seropositive Versus HIV-Seronegative Women.**

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### **Abstract:**

**BACKGROUND:** This analysis compared the frequency of persistent *Trichomonas vaginalis* (TV) among HIV-seropositive and HIV-seronegative women. **METHODS:** Data were obtained from women enrolled in an open cohort study of sex workers in Kenya. Participants were examined monthly, and those diagnosed as having TV by saline microscopy were treated with single-dose 2 g oral metronidazole. All women on antiretroviral therapy (ART) used nevirapine-based regimens. Generalized estimating equations with a logit link were used to compare the frequency of persistent TV (defined as the presence of motile trichomonads by saline microscopy at the next examination visit within 60 days) by HIV status. **RESULTS:** Three-hundred sixty participants contributed 570 infections to the analysis (282 HIV-seropositive and 288 HIV-seronegative). There were 42 (15%) persistent infections among HIV-seropositive participants versus 35 (12%) among HIV-seronegative participants (adjusted odds ratio, 1.14; 95% confidence interval [CI], 0.70-1.87). Persistent TV was highest among HIV-seropositive women using ART (21/64 [33%]) compared with HIV-seropositive women not using ART (21/217 [10%]). Concurrent bacterial vaginosis (BV) at TV diagnosis was associated with an increased likelihood of persistent TV (adjusted odds ratio, 1.90; 95% confidence interval, 1.16-3.09). **CONCLUSIONS:** The frequency of persistent TV infection after treatment with single-dose 2 g oral metronidazole was similar by HIV status. Alternative regimens including multiday antibiotic treatment may be necessary to improve cure rates for women using nevirapine-based ART and women with TV and concurrent BV.