

MTN 015
An Observational Cohort Study of
Women following HIV-1
Seroconversion in Microbicide Trials

Sharon A. Riddler, MD, MPH
University of Pittsburgh



Rationale

- Many potential compounds, with and without specific HIV-1 inhibitory activity administered topically and orally, will be studied by the MTN
- No data are available describing clinical outcomes of women following HIV-1 seroconversion during preventative microbicide trials
- It is critical to assess the short and long term impact of microbicide use in participants who become infected during product use – especially in regard to the potential for HIV-1 drug resistance

MTN 015 Hypothesis

Exposure to study agents in MTN clinical trials will not impact the natural history of HIV-1 infection as measured by the virologic, immunologic and clinical outcomes of participants with HIV-1 seroconversion during microbicide trials.

MTN 015 Primary Objective

To compare the plasma HIV-1 RNA level 12 months after HIV-1 seroconversion among ART naïve participants assigned to an active microbicidal or chemoprophylactic agent compared to control participants

Secondary Objectives

To compare or describe the following:

- Trajectory of CD4+ T cell counts
- Plasma HIV-1 RNA at six months post seroconversion
- Prevalence and persistence of HIV-1 genotypic mutations in plasma and genital tract specimens
- Virologic (HIV-1 RNA) and immunologic (CD4) response to initiation of antiretroviral therapy
- HIV-1 drug resistance profile at time of ART failure
- HIV-1 related and AIDS-defining clinical events and deaths
- Changes in sexual behavior and partnership status
- Establish a repository of specimens for future use

Study Design

- **Study Population:**
 - Women who have HIV-1 seroconversion during participation in microbicide trials
- **Sample Size:**
 - Approximately 500 (estimated minimum 165, with 138 available for the primary objective)
- **Study Design:**
 - Prospective observational cohort

Study Design

- **Study visits:**
 - Entry, Months 1, 3, 6, Q6 after seroconversion date in the parent study
 - If ART initiated, visits will be Months 1, 3, 6 and Q6 after ART
- **Evaluations:**
 - Real-time: CD4, HIV RNA, 'safety' labs (CBC, LFT, creatinine), STI testing, baseline HIV drug resistance
 - Behavioral questionnaires
 - Repository: Plasma, PBMC, cervical lavage for future studies including resistance, HIV-specific immunity
- **Supportive services:**
 - Referral for HIV treatment; secondary prevention counseling; treatment and prevention counseling for STI; condoms;