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

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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;