MTN 016

Katherine Bunge, MD, MPH University of Pittsburgh Pittsburgh, PA USA



Introduction

 HIV Prevention (Microbicide/PrEP) trials recruit reproductive age women

- Pregnancy is a natural consequence
 - 85% per year in non-contraceptive users
 - 0.5-15% per year in typical users of all different methods



Rationale for investigation

- Sexual activity is common in pregnancy and the early post partum period
- Pregnancy may be a risk factor for HIV acquisition
- If microbicides are available, pregnant women will use them
- Anti-HIV microbicides may potentially have a role in preventing vertical transmission of HIV

MTN approach

 MTN: Proactively evaluate microbicides and other prevention tools in pregnancy

MTN-002:

 Phase 1, open label, pharmacokinetic, placental transfer and safety evaluation

MTN-016

- HIV Prevention Agent Pregnancy Exposure Registry
 - Protocol development in progress

MTN-016

- HIV Prevention Agent Pregnancy Exposure Registry
 - Prospective observational cohort
 - 500 pregnant women and 300 live infants
 - Inadvertent exposure to microbicides and/or PrEP agents during HIV prevention trials
 - Planned exposures (MTN-002)
 - Controls = Placebo exposed
 - Planned through May 31st, 2013



Exposures

- Tenofovir gel
- Oral tenofovir disoproxil fumarate (TDF)
- Oral emtricitabine/TDF
- UC-781 gel
- Placebo products



Objectives

- Primary Objectives
 - To compare the prevalence of spontaneous pregnancy loss and structural abnormalities in fetuses
 - Mothers exposed to active agent vs. placebo

 Evaluate fetuses, newborns and infants for unique patterns of malformations



Objectives

- Secondary Objectives
 - To monitor for adverse pregnancy outcomes
 - To compare growth parameters in the first year of life
 - To provide a cohort of unexposed newborns and infants
 - This cohort will represent the background incidence of major birth defects and abnormalities in HIV prevention trials



Objectives

- Exploratory Objectives
 - To monitor for select risks of agents identified in preclinical studies by trimester of exposure
 - To evaluate the prevalence of HIV drug resistance mutations in HIV-infected infants
 - To compare developmental screening results during the first year of life



Participants

- Parent trial participants will be offered enrollment whenever it is determined that there has been an exposure to a study agent during pregnancy
- Sites are encouraged to enroll participants as early in pregnancy as possible
- Open to participants from other HIV prevention trials not part of the MTN



Study visits

- Mother
 - Screening and Enrollment
 - Quarterly
 - Pregnancy outcome
- Infant
 - Newborn visit
 - Month 1
 - Month 6
 - Month 12



Screening and enrollment

- Administrative
 - Obtain written informed consent
 - Locator information
 - Reimbursement
- Clinical
 - Obtain medical history
 - Obtain medication history
 - Obtain pregnancy history
- Radiology
 - Dating obstetrical ultrasound



Quarterly visits

- Administrative
 - Locator information
 - Reimbursement
- Clinical
 - Update medical history
 - Update medication history
 - Update pregnancy course
- Radiology
 - Anatomy ultrasound



Pregnancy outcome visit- mother

- Administrative
 - Locator information
 - Reimbursement
- Clinical
 - Update medical history
 - Update medication history
 - Update pregnancy history
 - Obtain pregnancy outcome





Pregnancy outcome visit- mother

- Outcomes of interest
 - Pregnancy-related morbidities
 - Hypertensive disorders
 - Premature rupture of membranes
 - Abnormal placentation
 - Type of delivery
 - Gestational age
 - Delivery complications
 - Chorioamnionitis
 - Intrapartum hemorrhage



Newborn visit (up to 10 days of life)

- Administrative informed consent
- Clinical
 - Medical history
 - Medication history
 - Weight
 - Length
 - Head circumference
 - Abdominal circumference
 - Physical exam
 - Photographic documentation of suspected or confirmed anomalies



Newborn visit (up to 10 days of life)

- Laboratory
 - HIV tests for infants born to mothers identified as HIV-infected



Infant follow-up

- Performed at 1, 6, and 12 months
- Administrative- locator information
- Clinical
 - Update medical history
 - Update medication history
 - Weight
 - Length
 - Head circumference
 - Physical Exam
 - Development assessment (6 and 12 mos)
- Laboratory as needed



HIV infected newborns

- Quarterly testing
 - HIV-1 RNA
 - Standard genotypic testing
 - Plasma for storage
 - Additional resistance testing as needed



Update

Currently under protocol revision

Anticipate DAIDS approval 10/08

Begin enrollment early 2009

