

HPTN 069: Update



Roy M. Gulick, MD, MPH

Chief, Division of Infectious Diseases

Professor of Medicine

Weill Medical College of Cornell University

New York City

Maraviroc for PREP: Advantages

- **Entry inhibitor**
- **MVC safety profile X 5 years *Gulick IAS 2012***
- **MVC achieves high tissue levels**
 - **3X higher in vaginal secretions *Dumond JAIDS 2009***
 - **8-26X higher in rectal tissue *Brown JID 2011***
- **MVC prevented HIV infections in animal model *Neff PLoS One 2010***
- **MVC drug resistance is uncommon**
- **MVC once-daily dosing possible *Rosario Brit J Clin Pharm 2008***
- **MVC used uncommonly for HIV treatment**

MVC for PREP: Disadvantages

- **Limited safety data in HIV-uninfected individuals**
- **Increased pathogenicity of some viral infections (e.g., West Nile virus)**
- **Other theoretical safety risks**
- **Not labeled for once-daily dosing**
- **Some potential for drug-drug interactions**
- **Not active against X4 virus**

**HPTN 069/A CTG 5305
NEXT-PREP**

**Novel Exploration of
Therapeutics
for PREP**

HPTN 069 Design

- **Primary objective: Assess safety and tolerability of PrEP regimens to prevent HIV transmission in at-risk MSM**
- **Study Design**
 - **Phase II, double-blind, randomized**
 - **4 arm/multi-site (12 sites – US only)**
 - **400 participants to be enrolled**

Study Arms

- **There are 3 active study drugs**
 - **maraviroc (MVC)**
 - **emtricitabine (FTC)**
 - **tenofovir (TDF)**
- **Regimens being tested are:**
 - **maraviroc + FTC placebo + TDF placebo**
 - **maraviroc + emtricitabine + TDF placebo**
 - **maraviroc + tenofovir + FTC placebo**
 - **tenofovir + emtricitabine + MVC placebo**

Secondary Objectives

- **Changes in lipids**
- **Changes in bone mineral density (BMD)**
- **Drug Interaction between the MVC, FTC and TDF – Drug Interaction Subset (n=72)**
- **Tissue concentrations (MVC, FTC, TFV, FTC-TP, TFV-DP) – Tissue Subset (n=60)**
 - **Immune activation; HIV infectivity**
- **Adherence – CASI, EDM, and drug concentrations**
- **Sexual behavior using CASI, SMS**
- **QOL assessments**

Key Inclusion/Exclusion Criteria

INCLUSION

- **Male ≥ 18 years old**
- **At-risk: History of receptive or insertive anal intercourse without use of condoms with ≥ 1 HIV-infected partner or partner of unknown HIV serostatus within 3 months of study entry**

EXCLUSION

- **Any reactive HIV test results at screening or enrollment, even if HIV infection is not confirmed**
- **Ongoing intravenous drug use**

HPTN 069 Sites



HPTN 069: Status

- Fully approved by HPTN and ACTG
- Final Version 2.0 (4/9/12)
- FDA reviewed, IND number assigned
- Site IRB approvals
- CRFs, CASI, CTAs completed
- Study drugs received from Gilead and ViiV
- Anticipated to open in June 2012

- Cohort of 200 women to be added
- Primary analysis: Safety and tolerability in a combined population of at-risk MSM and women

Core Protocol Team

Protocol Chair/Co-Chairs:

Trip Gulick, Ken Mayer, Tim Wilkin

SCHARP: Ying Chen, Leslie Cottle

HPTN Network Lab:

Sue Eshleman, Paul Richardson, Joe Margolick

HPTN CORE: Marybeth McCauley, Philip Andrew,
Teresa Nelson, Jonathan Lucas

DAIDS: David Burns, Wairimu Chege, Fulvia Veronese,
Ana Martinez

Pharmaceutical Partners:

Gilead - Jim Rooney; ViiV - Alex Rinehart

Other Investigators: Rivet Amico, Adriana Andrade,
David Bangsberg, Todd Brown, Sally Hodder, Raphy
Landovitz, Kate MacQueen, Bruce Schackman