HPTN 069: Update



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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/ACTG 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

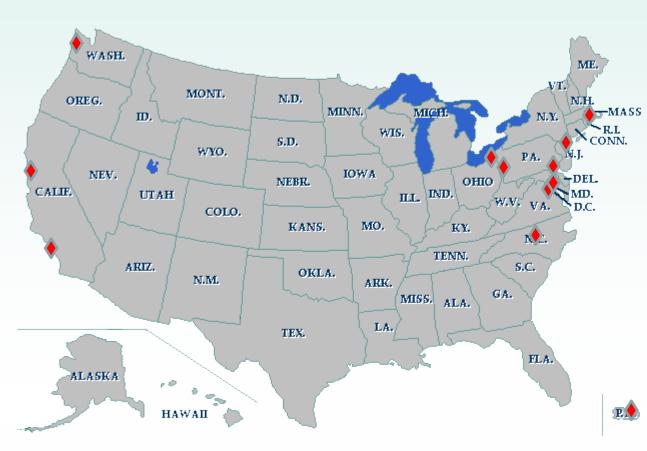
INCLUSION

- 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



Boston
New York City
Philadelphia
Baltimore
Washington, DC
Chapel Hill
San Juan
Pittsburgh
Cleveland
Seattle
San Francisco
Los Angeles





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

<u>DAIDS</u>: 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