



UNIVERSITY OF WASHINGTON
INTERNATIONAL CLINICAL RESEARCH CENTER
PARTNERS PrEP STUDY

The Partners PrEP Study: Enrollment of HIV-1 Serodiscordant Couples into a Phase III, Randomized Trial of Antiretroviral Pre-Exposure Prophylaxis for HIV-1 Prevention

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Background

New prevention strategies are needed for populations at high risk for HIV-1.

Pre-exposure prophylaxis (PrEP), in which an HIV-1 uninfected person takes an antiretroviral medication as prophylaxis against HIV-1, is a promising biomedical HIV-1 prevention strategy under investigation in six ongoing or planned efficacy trials worldwide.

Overview

The Partners PrEP Study is a phase III, multi-site, randomized, double-blind, parallel-arm, placebo-controlled trial of tenofovir disoproxil fumarate (TDF) and co-formulated emtricitabine/tenofovir disoproxil fumarate (FTC/TDF).

Primary Objectives

- To evaluate if once-daily PrEP with TDF or FTC/TDF provides additional benefit in preventing HIV-1 acquisition among HIV-1 uninfected persons within heterosexual HIV-1 discordant couples, who are receiving standard prevention services.
- To assess the safety of daily PrEP using TDF or FTC/TDF by rates of adverse events in HIV-1 uninfected persons randomized to daily TDF or FTC/TDF, compared to those randomized to placebo.

Study Population

- Population surveys and mathematical modeling studies suggest that stable, heterosexual HIV-1 serodiscordant couples account for the majority of new HIV-1 transmissions among adults in sub-Saharan Africa.
- PrEP is a potential biomedical prevention strategy among serodiscordant couples where the HIV+ partner is not yet eligible for ART, based on national guidelines.

Eligibility Criteria

Couples

Inclusion Criteria

- Both members meet inclusion/exclusion criteria
- Sexually active
- ≥6 episodes of vaginal sex in prior 3 months

HIV-1 Uninfected Partners

Inclusion Criteria

- Age ≥18 and ≤65
- HIV-1 seronegative
- Creatinine clearance ≥ 60 ml/min
- Serum creatinine ≤1.3 (men)/≤1.1 mg/dL (women)
- Total bilirubin ≤1.5x upper limit, ALT and AST <2x upper limit of normal
- Neutrophil count >1,300/mm³; platelets >125,000/mm³; hemoglobin >11 g/dL
- Not infected with hepatitis B virus

Exclusion Criteria

- Current pregnancy or breastfeeding
- Planning to become pregnant
- Plans to re-locate or travel
- Positive urine dipstick for glycosuria/proteinuria
- Active serious infection; significant medical problems
- History of non-trauma bone fracture
- Use of antiretroviral medications
- Use of potential nephrotoxic medications

HIV-1 Infected Partners

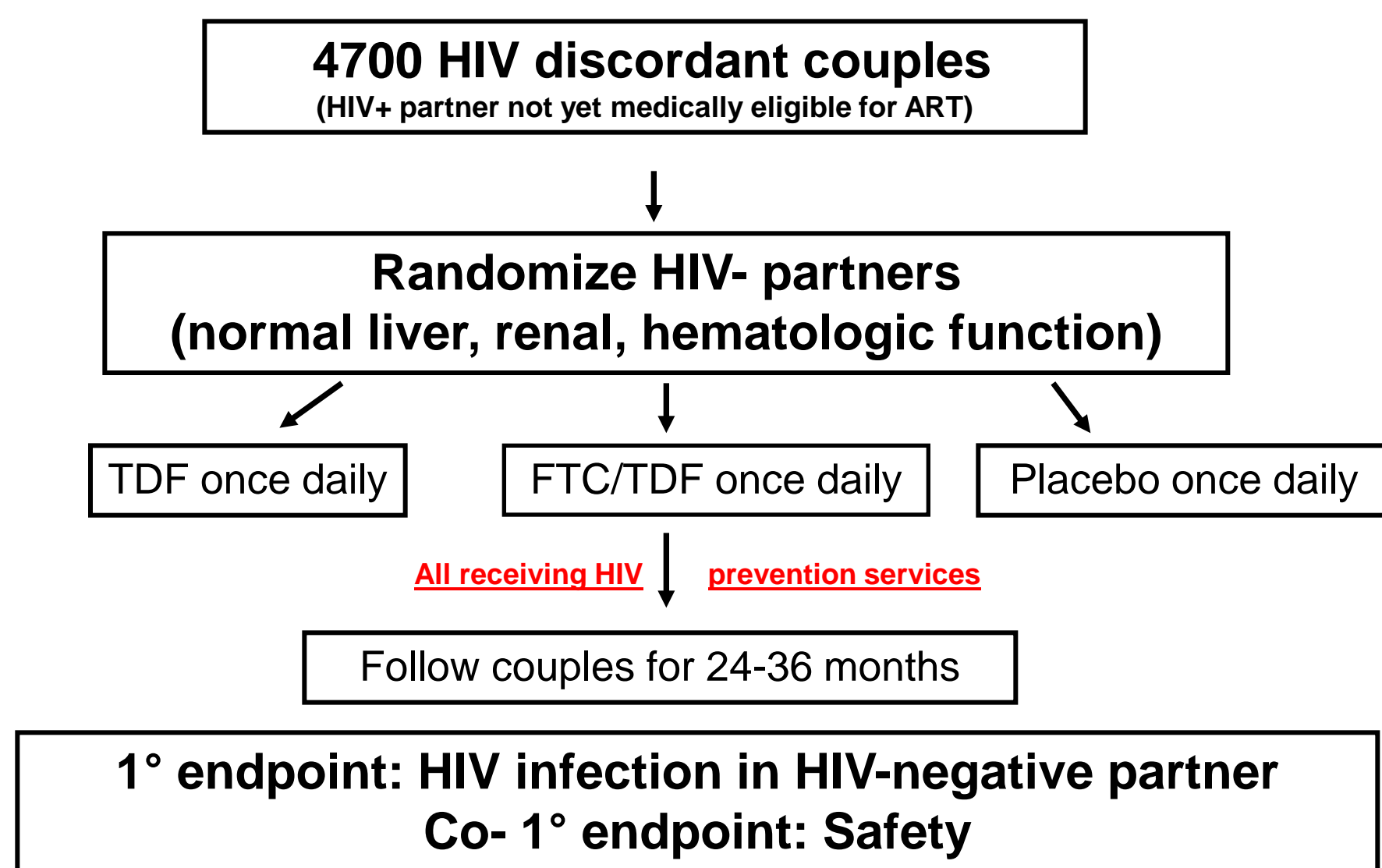
Inclusion Criteria

- Of legal age
- Willing to provide written informed consent
- HIV-1 infected based on positive EIA
- CD4 cell count ≥250 cells/mm³
- Not meeting national ART guidelines
- No history of any clinical AIDS-defining diagnoses.

Exclusion Criteria

- Current use of ART
- Currently enrolled in an HIV-1 treatment trial

Design



Study Sites & Enrollments to Date



Eldoret,
Kisumu,
Nairobi,
Thika,
Kenya

Jinja,
Kabwohe,
Kampala,
Mbale,
Tororo,
Uganda

Study Procedures

HIV-1 uninfected participants

- Monthly HIV testing
- Monthly pregnancy testing
- 3-monthly monitoring of kidney, liver, and hematologic function
- Monthly monitoring of symptoms
- Monthly provision of study medication and adherence counseling

HIV-1 infected participants

- 3-monthly follow-up
- 6-monthly CD4 counts, referral for ART

All participants

- Monthly individual and couple risk-reduction counseling
- Free condoms
- Free contraception and contraception counseling
- Screening and treatment for sexually transmitted infections
- Provision/referral for other HIV-1 prevention services (e.g., male circumcision)

Population Characteristics

	Median (IQR) or number (%)	
	HIV-1 Uninfected Partners	HIV-1 Infected Partners
(N=4065)		
Demographic characteristics		
Female	1526 (38%)	2539 (62%)
Age, years	34 (29-40)	33 (27-40)
Education, years	7 (4-10)	7 (4-9)
Any monthly income	3225 (79%)	2728 (67%)
Couple characteristics		
Married	4008 (99%)	
Duration of partnership, years	7.6 (3.0-14.3)	
Duration known HIV-1 serodiscordant, years	0.5 (0.1-2.0)	
Number of children in the partnership	2 (1-4)	
No children within the partnership	867 (21%)	
Sexual behavior characteristics of couple (separated by gender of HIV-1 uninfected partner = F / M)		
Number of sex acts, prior month	4 (2-7) / 4 (3-8)	
Any unprotected sex acts, prior month	313 (21%) / 678 (28%)	
Any sex with non-study partner, prior month	9 (1%) / 356 (14%)	
Medical characteristics		
CD4 count, cells/mm ³	N/A	493 (372-661)
CD4≥350 cells/mm ³	N/A	3254 (80%)
Using contraception, in addition to condoms (women only)	755 (49%)	1458 (57%)
Circumcised (men only)	1339 (53%)	479 (31%)

Conclusions

East African HIV-1 serodiscordant couples can be successfully enrolled into a trial of PrEP:

- >4000 couples enrolled in 24 months, on target for Q4 2010 completion of target 4700 couples
- Demonstrates feasibility of diverse strategies for recruitment and for couples counseling in East Africa
- Low screen:enroll ratio (<2:1), despite extensive eligibility criteria
- Showcases success of urban and rural sites, including sites new to clinical trials

Serodiscordant couples are a priority population for evaluation of novel HIV-1 prevention strategies.

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