

Testing Our Readiness: Considering Potential Benefits of Increased Access to Testing in the Integrated Planning for ARVs

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Objective

Assess knowledge and use of access to testing to promote study and implementation of antiretroviral therapy (ARVs) in novel prevention interventions.

Access to HIV Testing & ARV-Based Prevention

We propose to explore effects and considerations of increased access to HIV testing when used in the context of antiretrovirals (ARVs) in prevention/prophylaxis and in acute infection clinical trial or care settings. The effects and considerations to be examined are beyond those known improvements testing affords to facilitate counseling and behavioral intervention. Instead, our focus is to understand how

(a) increased testing may best improve the conduct of these studies or the public health benefits when/if implemented, and

(b) how availability of these novel interventions, if proven effective, might be made to support testing behavior.

This poster poses questions and solicits input on these issues to you and others. The PrEP Committee welcomes your answers to them to inform a process that seeks to:

- Probe for knowledge of potential benefits that increased testing access may bring to ARV-based prevention ("ARP")

- Assess level of knowledge & utility about the role of testing in these recommended and experimental interventions

- Evaluate potential of training and structured strategic planning to reduce barriers to testing access on the potential integration of ARVs as prevention tools

Background

The Prevention Research Advocacy Working Group (PRAWG) was founded by the Community HIV/AIDS Mobilization Project (CHAMP), a national organization committed to ensuring the development of a broad and effective range of HIV prevention options in the next decade.

The PRAWG initiated a PrEP Committee, composed of researchers and community advocates. The Committee identifies questions that must be answered, fosters discussions in and beyond our communities about the opportunities and challenges of this potentially successful intervention, and prepares for advocacy efforts to ensure access to pre-exposure prophylaxis if proven effective.

To further these efforts, the PrEP Committee has started a process of inquiry to assess different points in the matrix of HIV/AIDS research, testing, prevention, treatment and care in which we can further the pursuit for effective antiretroviral-based prevention strategies.



Antiretroviral-Based Prevention (ARP)

	Oral or Topical Pre-Exposure Prophylaxis (PrEP; microbicide)	Non-Occupational Post-Exposure Prophylaxis	Treatment of Acute HIV Infection	Treatment of HIV+ Person as HIV Prevention
Status	In research studies	Public Health Service guidelines, but little uptake	In research studies to determine effectiveness	In research studies (HPTN 052 in serodiscordant couples); Montaner proposal
Target	HIV negative persons aware of level of risk	HIV negative persons who have had a high risk exposure	Persons newly infected with HIV	Persons Living with HIV who are on, or considering ARVs
Examples of testing intersections	<ul style="list-style-type: none"> • ID high-risk individuals • Testing as a part of PrEP intervention to pick up potential infections and guard against possible development of resistance 	<ul style="list-style-type: none"> • ID high-risk individuals • Testing as part of intervention to confirm pre-PEP status and to ensure success of intervention • Opportunity to counsel repeat PEP users 	<ul style="list-style-type: none"> • Access to acute HIV testing limited to several public health systems (NC, NYC) • ID acutely infected for research protocols 	<ul style="list-style-type: none"> • Increased uptake in ARVs if increased detection of HIV positives • Prevention and conception counseling for heterosexual partners when found to be serodiscordant • Reduction of individual viral load and its potential to reduce infection incidence & prevalence in populations including MSM

For Your Consideration – Part A: Proposed Research Questions & Methodologies

Research on Antiretroviral-Based Prevention

- How do researchers conducting both clinical and behavioral studies of treatment ARP believe that increased HIV testing would support enrollment?

- Are there particular testing initiatives, and linkages between testing and specific research studies, that could be designed to support increased enrollment?

Implementation of Antiretroviral-Based Prevention

- Can increased access to testing improve the precision of defining high or at risk sexual networks and improve the targets of population most in need of these biomedical approaches?

- Will increased testing access help during implementation to lead the epidemic, not follow it, and increase effectiveness of rollout?

- Will increased access to testing be a necessary methodology component of studies of population level reductions in HIV transmission due to expanded treatment of HIV+ persons?

Novel Interventions as Incentive to Testing

- If demonstrated to be effective in clinical trials, would various ARP interventions provide incentive to untested individuals to learn their serostatus?

- Are there particular initiatives and messages that could be developed to encourage increased testing so that seronegative people would engage ARP strategies proven to be effective?

For Your Consideration – Part B: Available HIV Tests in the United States

Full list of individually approved assays and methods at: <http://www.fda.gov/cber/products/testkits.htm>

CATEGORY OF TEST	TYPE OF TEST
ELISA (enzyme-linked immunosorbent assay; also known as EIA – enzyme immunoassay) • Tests blood, urine, oral fluids • Includes rapid tests	Detects HIV antibodies. Window period: after infection, may be shortened to 2-to-6 weeks with newer tests
Western Blot or IFA (indirect fluorescent antibody)	Detects specific HIV-protein bands, antibodies
HIV NAAT (nucleic acid amplification testing)	Detects HIV genetic material directly. Window Period: short Primary detection use has been for blood donor screening, rather than for infection screening

Considering the different ARP interventions, we should not look at testing in a singular, categorical, monolithic way, but rather acknowledge the variety of tests.

- How does one choose and deploy each test in different clinical settings for different testing purposes?
- Should increased access to testing to aid in biomedical prevention be based on increased use of NAT tests that can shorten the window periods of detecting HIV transmission? Will increased access to testing, especially NAT, add research value to the recently studied STARHS conclusions of incidence?
- Will the availability of biomedical intervention make testing more attractive or be seen as an incentive for populations who have held back from testing because of other barriers?

Conclusion

In a time of increased interest in the role of ARVs in primary HIV prevention, the role of testing as a key component for prevention may rapidly be amplified beyond counselling or behavioral interventions. Initial results of PrEP trials are expected in the next 18 months.

Initial planning for the project has revealed:

- a need for basic information and opportunities for dialog on issues of ARVs as prevention among stakeholders, including those at risk of HIV infection, funders and decision-makers, and

- a high level of interest in exploring structures to utilize the momentum of explorations of ARVs as prevention as a motivating factor for spurring more comprehensive or rapid efforts to increase testing access.

Selected Readings

Treatment as Prevention
Aranka Anema MSc, Evan Wood MD PhD, Julio S.G. Montaner MD. The use of highly active retroviral therapy to reduce HIV incidence at the population level CMAJ • JULY 1, 2008 • 179(1)

Sexual Networks, Epidemiology, Focusing Populations to Target for Intervention- Beneficiaries of Confirmatory Testing
Local Acts, Global Consequences: Networks and the Spread of HIV

Wednesday, April 25, 2007 (webcast), Martina Morris, Ph.D., University of Washington
<http://videocast.nih.gov/Summary.asp?File=13792>

Testing Methods in Different Intervention Settings
Peter Leone. STD Co-Infection in Acute HIV: Indications & Methodologies for Targeted Screening. Expansion of HIV Testing & Implications for STD Management. National Network of STD/HIV Prevention Training Centers in Collaboration with the HIV Medicine Association 46th Annual Meeting of IDSA Washington, DC. Friday, October 24, 2008

Test Selection Issues
Joanne Stekler, Paul D. Swenson, Robert W. Coombs, Joan Dragavon, Robert W. Wood, Matthew R. Golden. Anonymous Testing & Rapid Testing in Screening for Acute HIV Infection. 14th Conference on Retroviruses and Opportunistic Infections. 2007. <http://www.retroconference.org/2007/PDFs/340.pdf>

Treatment Options Incentives for Testing When Chronic Infection Prevails
Nomi C. Levy, Rebecca A. Mksad and Oliver T. Fein. From treatment to prevention: The interplay between HIV/AIDS treatment availability and HIV/AIDS prevention programming in Khayelitsha, South Africa. J. of Urban Health. Volume 82, Number 3 / September, 2005 DOI 10.1093/urban/jti090

Contact Us!

The PrEP Committee invites feedback on issues raised in this poster & our work overall.

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