



Microbicides and Vaccines: Research in Progress

Rebekah Webb

Policy Development Officer, NAT



The National AIDS Trust:

- UK based HIV/AIDS policy development and advocacy organisation
- Working on UK and international HIV/AIDS policy issues organised around four pillars:
 - **Prevention**
 - **Stigma and discrimination**
 - **Treatment**
 - **Leadership**

Prevention:

- Reduction of new HIV infections amongst communities most at risk of HIV in the UK and globally by:
 - Supporting new prevention technologies
 - Supporting best practice in sexual health promotion
 - Promoting harm reduction policy and best practice

New Prevention Technologies:

HIV vaccines:

- Partnership with IAVI since 1996

Microbicides for STIs including HIV:

- Partnership with Global Campaign for Microbicides
- Leading UK/Ireland Campaign for Microbicides

SUCCESSFUL HIV PREVENTION FRAMEWORK

Political leadership

Education & behaviour change	Treatment access & PEP	Harm reduction IDUs	Condoms Male/ female	VCT	Secure blood	NPTs
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Vulnerability reduction measures

Evidence base

"We are not looking for a magic bullet, we are looking for a constellation of effective prevention products. An effective microbicide is a missing star. A successful vaccine is a missing star. We need both."

- Peter Piot, Executive Director of UNAIDS



What is a microbicide?

- Anything you can use rectally or vaginally to reduce the risk of infection with STIs incl. HIV
- Could take many forms: gels, creams, pessaries
- Bi-directional protection against STIs
- Non-clade specific
- Contraceptive action
- ARV technology

HIV Vaccines vs. other vaccines

- Level of protection
- Clade specificity
- Frequency of dose
- Adult/adolescent/child
- New ideas - oral vaccination
- Stigma?
- Therapeutic vaccines

Similarities

- New prevention technologies (treatment)
- Funding and advocacy challenges
- Research and development process
- Access concerns
- Levels of protection less than 100%
- **UNANSWERED SOCIAL RESEARCH QUESTIONS**

What is the development process?

- Laboratory testing
- **Phase I** - a few volunteers for safety, 1-2 weeks
- **Phase II** - 50-200 volunteers to ensure safety over longer period
- **Phase III** - large numbers (over 10,000) for effectiveness
- Licensing, manufacturing and distribution

Snapshot of current research

- **VACCINES:**
 - Global studies
 - Most pursuing cellular response
 - Role of IAVI
 - Four vaccines in Phase II
 - 2 in Phase III (VaxGen and Aventis)
 - Oxford and London studies
 - Ten years to go?

Snapshot of current research

- **MICROBICIDES:**
 - **Global studies**
 - **Four mechanisms of action**
 - **65 compounds in development**
 - **17 in clinical trials**
 - **Four Phase III trials awaiting funding**
 - **MRC trials (MDP) - Phase III**
 - **A microbicide by 2008-2010?**

Preparing now...

- How will we use vaccines/microbicides?
- Who will receive them?
- Will people want to be vaccinated?
- Will people want to use microbicides?
- What benefits will they bring?
- What unintended consequences will result?

More questions...

- How will people react to vaccines/ microbicides?
- Will stigma be a problem?
- Will microbicides be used covertly?
- Will people increase their risk behaviour?
- Will people stop using condoms?

Lessons learned...

- 'The Pill'
- Condoms
- Female condom
- Technology transfer



www.iavi.org



www.global-campaign.org

