

CAPRISA 004 Questions and Answers

- **The CAPRISA 004 clinical trial assessed the effectiveness and safety of 1% tenofovir gel in preventing HIV infection in women. It was conducted at two sites in South Africa from 2007 to 2009.**
- **Results** will be announced at the International AIDS Conference on Tuesday, 20 July 2010.

What will we learn from CAPRISA 004?

In addition to providing information about the safety and effectiveness of tenofovir gel, the CAPRISA 004 trial will provide important evidence about adherence to the product, dosing strategy, and drug resistance. This information will help scientists develop and evaluate future antiretroviral (ARV)-based microbicide candidates.

The CAPRISA 004 trial was conducted to very high standards and provided high quality HIV-prevention and health care to participants. As a result, the trial offers the scientific community additional information on achieving high levels of participant retention, on gel adherence and usage patterns, and on the acceptability of using ARV-based microbicides. These are all important lessons for future microbicide research.

Why did the CAPRISA 004 trial test gel use up to 12 hours before and within 12 hours after sex?

CAPRISA's priority was to evaluate microbicides that could meet the needs of South African women. A variety of HIV-prevention options will be necessary to meet the diverse, practical needs of women in Africa and the rest of the world. This includes microbicides that can be used around the time of sex and those that can be used daily. For example, in South Africa, unemployment is high, and a large percentage of employment contracts force people to leave their homes for long periods of time. In these conditions, women may not want to use a gel vaginally every day when their husbands or partners are away for weeks or months at a time.

What happened to women who became HIV positive during the CAPRISA 004 trial?

It is important to remember that the CAPRISA 004 trial was conducted in areas where many women are at high risk of HIV infection. Women enrolled in the trial were at risk of HIV infection if they had sex without a condom with an infected partner. Therefore, it was possible that some women would become HIV positive despite being in the trial and receiving a high-quality HIV-prevention package.

Women who became HIV positive during the trial were given the option of receiving ongoing care, and ARV treatment when necessary, via participation in other CAPRISA trials or referral to other government or non-governmental services.

Are other ARV-based microbicide candidates being tested to prevent HIV infection in women?

At the moment, tenofovir is the only ARV-based product in clinical testing for long-term safety and effectiveness against HIV infection.

However, there are a number of other ARV-based microbicide candidates in early safety studies including dapivirine and UC781, and others in pre-clinical laboratory studies. Dapivirine is being evaluated as a vaginal gel as well as in a slow-release vaginal ring. This is the first trial in Africa testing a vaginal ring that contains an ARV as a candidate microbicide.

How will the CAPRISA 004 results affect other ongoing microbicide trials?

The CAPRISA 004 study evaluated the use of tenofovir gel up to 12 hours before and within 12 hours after sex. It will contribute information about safety and drug resistance, which is vital to future ARV-based microbicide research. Whatever its outcome, the CAPRISA 004 results will add to the body of knowledge around ARV-based microbicides. Even if these results do not show a protective effect, it is still important, for example, to continue testing the use of tenofovir in other dosing strategies, such as daily gel use as well as testing other microbicide candidates that may help reduce the risk of HIV infection for women.

VOICE (Vaginal and Oral Interventions to Control the Epidemic) is a phase IIb trial that started in September 2009 and includes research centres in Malawi, South Africa, Zimbabwe, and Uganda. It tests tenofovir gel, as well as two oral candidates as oral pre-exposure prophylaxis (PrEP): tenofovir and Truvada (a combination of tenofovir and emtricitabine). VOICE is different from CAPRISA 004 in that it is testing whether inserting tenofovir gel every day reduces the risk of HIV infection for women—as opposed to applying it up to 12 hours before sex and within 12 hours after sex. The results of the VOICE trial are expected in 2012 at the earliest.

The need for additional HIV-prevention options for women remains urgent. Microbicides, PrEP, and vaccines are all viable HIV-prevention options for the future. It is critical that research continues in the search for HIV-prevention options for women.

What is the future of HIV-prevention research for women?

There is still a long way to go in HIV-prevention research. While we await the results of the VOICE trial and those of other ARV-based candidate microbicide and PrEP products, we need to advocate to sustain the momentum of HIV-prevention research and build on the capacity of research centres to conduct future trials.

We must also encourage operational research into practical distribution and marketing strategies. With this knowledge, the field will be able to respond quickly to ensure that when scientists identify an effective HIV-prevention product, the millions of women who most need it will be able to readily access it.

Microbicides and PrEP are among several HIV-prevention approaches being evaluated as options for women. As we help advance and improve this research, we continue advocating for improved access to existing prevention methods including voluntary counseling and testing and female condoms.

*An updated Q&A will be posted to www.global-campaign.org/CAPRISA_004.htm following the announcement of the trial results.

For a detailed briefing and opportunity to engage in discussion about these results, please join the **GCM Tele-briefing for Advocates** Wednesday 21 July at 9.00am Washington DC, 2.00pm London, 3.00pm in Vienna and Johannesburg.

To participate in the tele-briefing, please register at www.global-campaign.org/CAPRISA004.htm