



HIV VACCINE TRIALS NETWORK

Questions and answers: HVTN 073 vaccine trial

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1. What is the HVTN 073 trial?

HVTN 073 is the name of a clinical trial to test the safety and immune response of 2 experimental HIV vaccines. The experimental vaccines used in this trial are described in Question 4 below.

The products used in this trial are not produced from live HIV or from HIV-infected human cells. *This study vaccine cannot cause HIV infection.*

2. Who is conducting this trial?

This trial is sponsored by the Division of AIDS (DAIDS), within the National Institute of Allergy and Infectious Diseases (NIAID) at the National Institutes of Health (NIH), an agency of the US Department of Health and Human Services (DHHS).

The HIV Vaccine Trials Network (HVTN) will run the trial. The HVTN is a global partnership of researchers, government agencies, pharmaceutical companies, academic institutions, and community members. The HVTN is dedicated to conducting international clinical HIV vaccine trials in the safest, most efficient, most ethical, and most scientifically rigorous way possible.

3. What is a vaccine trial?

A vaccine is given to people to prevent infection or fight disease. Currently there is no licensed vaccine against HIV. In order to find an effective HIV vaccine, researchers need to test the experimental vaccines that seem most likely to help the body fight HIV. A vaccine trial is a way to test an experimental vaccine to see if it is safe to give to people. A vaccine trial can also be used to find out if an experimental vaccine might work to prevent or fight HIV.

4. What kind of experimental vaccine, or “study vaccine,” is being tested in HVTN 073?

The study vaccines are called SAAVI DNA-C2 and SAAVI MVA-C. From here on, we will call them the DNA vaccine and the MVA vaccine, or the “study vaccines.” The study vaccines were developed by scientists at the University of Cape Town, South Africa, for the South African AIDS Vaccine Initiative (SAAVI), a lead program of the Medical Research Council, South Africa.

The DNA vaccine, SAAVI DNA-C2, is made out of DNA. It is designed to tell your body to make a small amount of some proteins that are found in HIV. Your body’s immune system may recognize these proteins and prepare itself to fight HIV. This is called an immune response.

The MVA vaccine, SAAVI MVA-C2, was made from a virus called modified vaccinia Ankara (MVA) virus. It is similar to the smallpox vaccine that has been used worldwide. The MVA virus in the vaccine has been changed so that it cannot grow in humans or spread to other people. Like the DNA vaccine, the MVA vaccine will tell your body to make small amounts of some proteins that are found in HIV. These proteins may cause your body to have an immune response.

The study vaccines have not been given to people before. They have been tested in rabbits, mice and monkeys. The animal tests of this MVA vaccine do not raise any serious safety concerns. Animal tests may not show what will happen in people.

5. Are these study vaccines safe?

Based on the data from animal studies, scientists believe that the study vaccines are suitable for use in human trials.

But there is always the possibility that there could be problems no one expected. That is why these study vaccines, like any new drugs or vaccines, need to be tested in people in a clinic setting. Each participant's health and safety will be watched closely throughout the trial.

The study vaccines do not contain live HIV virus, and therefore there is no way for it to cause HIV infection.

6. Can these study vaccines cause HIV infection?

It is *impossible* to get HIV infection or AIDS from this study vaccines. They are not made from live HIV, killed HIV, or HIV-infected cells.

This study vaccine cannot cause HIV infection.

7. How could the study vaccines help prevent HIV/AIDS?

The study vaccine is designed to mimic the structures of HIV. In doing this, the vaccine may cause a response from a person's immune system. During this response, the immune system may learn to recognize HIV without being exposed to real HIV.

If a person who has received the study vaccine is later exposed to HIV, hopefully the immune system would be prepared to respond. However, it is not known if the vaccine will prevent HIV/AIDS. More clinical trials need to be done to learn if the vaccine works.

It is important to remember that being given a study vaccine does not mean a participant is protected from HIV infection. Participants are counseled on how to avoid behavior that will put them at risk of HIV infection.

8. Why is this trial being done?

This is a phase 1 trial, meaning its main purpose is to test if the study vaccines are safe to give to people.

The study vaccines have already been tested in the laboratory and in animals. Researchers now want to learn more about the potential of these vaccines when they are given to people. This trial will be the first time these study vaccines are tested in people.

9. Who is eligible to participate in HVTN 073?

All participants must meet certain criteria to be eligible for the trial.

Participants must be healthy adults who are between 18 and 45 years old and HIV negative (free of HIV infection). Participants also must not have received the smallpox vaccine in the past.

Potential participants are asked about their medical history and are given a physical examination. They then have blood and urine samples taken for routine testing. They are also asked about their sexual activity and drug use.

People who want to join the trial and were born female will be given a pregnancy test. Those who are pregnant or breastfeeding are not eligible to join. Anyone in the trial who was born female and who is capable of getting pregnant must agree to use effective birth control starting at least 21 days before the first injection and continuing until the last clinic visit.

10. When and where is this trial being conducted?

HVTN 073 is an international trial and will be done in 2 countries: the US and South Africa. The trial is expected to begin enrolling participants around February 2008. If all regulatory approvals are received, it will be conducted in 3 cities: Cape Town and Soweto, South Africa; and 2 sites in Boston, MA, in the US.

11. How will the safety and rights of participants be protected?

The HVTN works hard to protect the safety and rights of the participants. Before they join the trial, volunteers are given information about HIV and AIDS, about the reasons for the trial, about possible risks and benefits, and about trial procedures. The clinic staff allows plenty of time to talk with volunteers, answer their questions, and give information in writing.

After the trial has been fully explained, volunteers are asked to sign an informed consent form. They sign this form before being screened for eligibility and before enrolling. The informed consent form helps confirm that participants have made an informed decision about joining the trial. Volunteers will have plenty of time to think about whether they want to join the trial. They may decide not to enroll. If they do enroll, they may still leave the trial at any time without losing the benefits of their standard medical care.

During the trial, the clinic staff monitors participants to make sure the study vaccine is not causing them problems. Participants will be given any new information that could affect whether they want to stay in the study.

Participants are reminded often that being in a vaccine trial does not mean they are protected from HIV. They are counseled at every clinic visit on ways to avoid HIV. (This counseling might include, for example, talking about correct condom use.) It is important for participants to understand that any new experimental vaccine may have both medical and nonmedical risks.

12. Could the study vaccine cause a “false-positive” or vaccine-induced positive result on an HIV antibody test?

Some experimental vaccines may make a trial participant test positive on an HIV antibody test, even if the participant is not infected with HIV.

One way vaccines can create an immune response is by causing the body to make antibodies. Antibodies are made by the body to fight infection. Common HIV tests look for antibodies against HIV. This means that after a participant gets an experimental HIV vaccine, a standard HIV test may say the person has HIV, even if that isn't the case. This result is called a “false-positive” or “vaccine-induced positive.”

This clinic has special HIV tests that look for the virus itself instead of looking for antibodies. These tests can be used to determine if a positive test result is due to the vaccine or a true infection.

No health problems are associated with a positive HIV test result that is caused by a vaccine. But someone who gets that type of test result may be treated unfairly by others. People with a positive HIV test, even a vaccine-induced positive, are not allowed to donate blood. They may also have problems getting insurance or medical/dental care, traveling to other countries, obtaining employment, serving in the military or Peace Corps, or with their relationships with friends and family. The clinic staff can help with any such problems. Services exist to help any study participant with a vaccine-induced positive HIV test result.

13. How long will it take to find out if the study vaccine works?

It could take several years to find out if the study vaccine works. This study vaccine would need to be investigated in other clinical trials—phase 2 and phase 3 studies, for example—to test safety in more

people, to get a better idea of whether the immune system responds to the vaccine, and to see if the study vaccines help prevent HIV infection. The results of HVTN 073 will help researchers determine whether they should proceed with other trials. Participants who received the study vaccines in HVTN 073 will not be eligible for any future trial of these products.

14. Who reviewed and approved this trial?

The study vaccine is considered investigational, meaning the US FDA only allows it to be used in research. It has been made according to FDA guidelines and was reviewed by the FDA. The Protocol Team (the people who designed the trial) also carefully reviewed the information about the study vaccine before deciding to begin the trial.

The safety and rights of participants in HVTN 073 are monitored by Institutional Review Boards (IRBs) or Independent Ethics Committees (IECs) at each participating clinical research center. The safety of the trial is also monitored by local Institutional Biosafety Committees (IBCs). Community members are involved throughout the trial to ensure that the research is acceptable to the community.

15. For more information

About AIDS vaccine clinical trials: AIDS Clinical Trials Information Service, 1-800-TRIALS-A (USA only); www.clinicaltrials.gov

About the HVTN: www.hvtn.org

About SAAVI: www.saavi.org.za