



HIV VACCINE TRIALS NETWORK

Questions and answers: HVTN 077 vaccine trial

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1. What is the HVTN 077 trial?

HVTN 077 is the name of a clinical trial to test the safety and immune response to different combinations of 3 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. *These study vaccines 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 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 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 and to study how the human immune system responds to the vaccine. 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 vaccines, or “study vaccines,” are being tested in HVTN 077?

HVTN 077 tests 3 study vaccines called VRC-HIVDNA044-00-VP (DNA vaccine), VRC-HIVADV038-00-VP (rAd5 vaccine), and VRC-HIVADV027-00-VP (rAd35 vaccine). From here on, we will call them the “DNA,” “rAd5,” and “rAd35” vaccines or the “study vaccines.” These study vaccines have been given to people before in previous vaccine trials. The study vaccines were developed by the Vaccine Research Center (VRC), which is part of the NIH.

The DNA vaccine contains pieces of man-made DNA that are similar to the DNA found in HIV. When this vaccine is given to people, it will tell the body to temporarily make small amounts of proteins normally made by HIV. The body may develop an immune response to these HIV proteins.

Two of the study vaccines (rAd5 and rAd35) are “adenoviral vector” vaccines. These are made out of 2 kinds of adenovirus. Adenoviruses cause colds and respiratory infections. Some kinds can also cause diarrhea. The adenoviruses in this study have been changed so that they cannot cause infections.

5. Are these study vaccines safe?

In the past study of these vaccines, people were able to take the vaccines without too much discomfort and only minor reactions. Vaccines similar to the DNA and rAd5 vaccines have been given to hundreds of people in earlier studies without serious side effects. The rAd35 study vaccine has been tested for safety in a small number of people without serious side effects.

But there is always the possibility that there could be problems no one expected. That is why these study vaccines, like any new drug or vaccine, 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, and therefore there is no way for them to cause HIV infection.

6. Can these study vaccines cause HIV infection?

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

These study vaccines cannot cause HIV infection.

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

The study vaccines are designed to mimic HIV. In doing this, the vaccines 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 vaccines is later exposed to HIV, hopefully the immune system would be prepared to respond. This immune preparation from the vaccines may reduce the damage that HIV can do to the body. However, it is not known if these vaccines will prevent HIV/AIDS. More clinical trials need to be done to learn if the vaccines work.

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 1b trial, meaning the study vaccines or very similar vaccines have been tested in the laboratory, in animals, and in other clinical trials in people. These people did not show any serious side effects from the vaccines.

This trial will provide more information about the safety of these vaccines. It will also help evaluate which combinations of the 3 vaccines are the most promising. The results of this trial will help researchers decide how to move forward in developing potential new HIV vaccines.

9. How many people are in this trial?

The trial will involve 192 participants: 164 participants will receive one or another combination of the vaccines and 28 participants will receive a control, which is a solution that does not contain the vaccines.

10. Who is eligible to participate in HVTN 077?

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

Participants must be healthy adults who are between 18 and 50 years old and HIV negative (free of HIV infection).

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.

Potential participants are tested for antibodies to 2 viruses on which 2 of the study vaccines are based. To be eligible to participate in the study, participants must be free of antibodies to Ad35; participants in 3 of the study groups must be free of antibodies to Ad5 as well.

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.

All volunteers are tested to ensure they are HIV negative. A volunteer who is HIV positive at screening cannot enroll in the trial.

11. When and where is this trial being conducted?

The trial is expected to begin enrolling participants around December 2008. If all regulatory approvals are received, there are plans to conduct trials in 7 cities: Atlanta, Birmingham, Boston, Nashville, New York, Rochester, and San Francisco.

12. 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 vaccines are 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.

13. Could the study vaccines 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.

14. How long will it take to find out if the study vaccines work?

The results of this trial will help the Vaccine Research Center at NIH decide whether to manufacture new generations of DNA, rAd5, and rAd35 vaccines. It could take several years to find out if these new vaccines work. This new generation of study vaccines 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 or reduce the amount of virus in people who do become infected with HIV. The results of HVTN 077 will help researchers determine whether they should develop this new generation of vaccines and proceed with other trials to test them. Participants who received the study vaccines in HVTN 077 will not be eligible for any future trial of these products.

15. Who reviewed and approved this trial?

The study vaccines are considered investigational, meaning the US FDA only allows them to be used in research. They have been made according to FDA guidelines and were reviewed by the FDA. The Protocol Team (the people who designed the trial) also carefully reviewed the information about the study vaccines before deciding to begin the trial.

The safety and rights of participants in HVTN 077 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 rights of participants are being protected and that their needs are being met.

16. For more information

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

About the HIV Vaccine Trials Network: www.hvtn.org