



HIV VACCINE TRIALS NETWORK

Questions and answers: HVTN 205 vaccine trial

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1. What is the HVTN 205 trial?

HVTN 205 is the name of a clinical trial to test the safety and immune responses to a combination 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. *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 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. If safe, the vaccine can also be used in subsequent trials 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 205?

HVTN 205 tests 2 study vaccines called pGA2/JS7 DNA (DNA vaccine) and MVA/HIV62 (MVA vaccine). From here on, we will call them “DNA vaccine,” the “MVA vaccine,” or the “study vaccines.” These study vaccines have been given to people before in a previous vaccine trial. 70 people have received the DNA vaccine and approximately 90 people have received the MVA vaccine. A total of 100 people received at least one of the vaccines. The study vaccines were developed by GeoVax, Inc.

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 make small amounts of proteins normally made by HIV. The body may develop an immune response to these HIV proteins.

The MVA vaccine was made from a virus called Modified Vaccinia Ankara virus, which was developed to protect against smallpox. The virus in the vaccine has been changed so that it will not spread in the body. People who are vaccinated with MVA will not be contagious to others around them. The MVA vaccine will instruct the body to make a few of the same proteins as the DNA vaccine, proteins that are found in HIV. These proteins may cause the body to have an immune

response. In an earlier study, participants who received both the DNA vaccine and the MVA vaccine produced more immune responses than participants who received only one of the vaccines.

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. Most side effects were mild or moderate reactions that happened in the first few days after vaccination. These side effects included pain or tenderness at the vaccination site, tiredness, feeling unwell, headaches, and body aches. These reactions did not last long and the people who had them recovered without any problems. These side effects are often seen in vaccine trials, and also with licensed, commercially available vaccines. No one reported severe reactions or serious side effects from the vaccine or adjuvant. We do not know if this study will have similar results to an earlier study.

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

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 two vaccines are 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 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 study vaccines 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 2 trial, meaning the study vaccines have been tested in the laboratory, in animals, and in people. In an earlier clinical trial of these vaccines, participants did not show any serious side effects from the vaccine.

Based on the research that has been done so far, the study vaccines have shown promising characteristics. Researchers are interested in finding out more about the safety of the vaccines in a larger group of people and to see how many people develop immune responses after receiving the vaccines. The study will also observe the quality of those immune responses to predict whether the vaccines might be helpful in fighting HIV infection.

9. How many people are in this trial?

The trial will include 225 participants: 150 participants will receive the vaccine and 75 participants will receive a placebo.

10. Who is eligible to participate in HVTN 205?

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.

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?

HVTN 205 is an international trial and will be done in 2 countries. The trial is expected to begin enrolling participants around November 2008. If all regulatory approvals are received, it will be conducted in 10 cities: Atlanta, Birmingham, Nashville, Boston, New York City, Rochester, Seattle, and San Francisco, in the U.S.; and Lima and Iquitos, in Peru.

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 vaccines 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?

It could take several years to find out if the study vaccines work. These study vaccines would need to be investigated in other clinical trials—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/AIDS. The results of HVTN 205 will help researchers determine whether they should proceed with other trials. Participants who received the study vaccines in HVTN 205 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 safety information about the study vaccines before deciding to begin the trial.

The safety and rights of participants in HVTN 205 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