

Informed Consent Form

A Double Blind, Randomized, Placebo-Controlled, Phase 1
Dose Escalation Trial to Evaluate the Safety and
Immunogenicity of an Inactivated Yellow Fever Virus Vaccine,
HydroVax-002 YFV, in Healthy Adults

NCT05172544

22 September, 2021



Consent To Participate In A Research Study

A Double Blind, Randomized, Placebo-Controlled, Phase 1 Dose Escalation Trial to Evaluate the Safety and Immunogenicity of an Inactivated Yellow Fever Virus Vaccine, HydroVax-002 YFV, In Healthy Adults

Protocol No: 20-001

Version 2.0 Dated: 22Sep2021

CONCISE SUMMARY

This study will include adults 18 and older and less than 50 years of age, who are in good health. The purpose of this research study is to assess the safety, reactogenicity (reactions at the injection site and overall side effects) and the body's immune response following one of two different dose levels of an investigational Yellow Fever vaccine (HydroVax-002 YFV). An investigational vaccine is a vaccine that is not yet approved by the FDA and is still being studied. This is the first study to test this vaccine in humans.

Participants will receive a shot of either the HydroVax-002 YFV at one of two different dosage levels or saline placebo (an injection with no active agent or drug). Twenty-eight days later participants will receive a second dose of either the same dosage of study vaccine or saline placebo.

Study participation will involve a screening visit, two vaccination visits, seven follow up research clinic visits and four visits conducted by telephone. Blood samples will be taken at each research clinic visit and stored for future research studies. We will ask you to measure your temperature and keep a diary of how you are doing for one week after each vaccination visit.

Sometimes after receiving a vaccine people may have symptoms such as fever, tiredness, fatigue, headache, chills, nausea, muscle aches, joint aches and body aches. Also, there may be reactions at the injection site such as redness, tenderness, swelling, itching or bruising. Most of these reactions are in the first day of receiving the vaccine and disappear without treatment within 1 or 2 days.

If you are interested in learning more about this study, please continue reading below.

This research study involves the testing of an investigational yellow fever virus vaccine. "Investigational" means that the vaccine has not been approved for use outside of research studies, or licensed for sale in the United States by the U.S. Food and Drug Administration (FDA), the government agency that licenses new vaccines. You are being asked to take part in this study because you are between 18 and 50 years of age, with no history of prior receipt of a yellow fever virus vaccine or having been infected with the yellow fever virus, you are in good overall health, able to comply with the study procedures, and able to provide consent for your participation.

Research studies are voluntary and include only individuals who choose to take part. Before you decide whether to take part, it is important for you to know why the research is being done, what it will involve and what will be the possible risks to you. Before agreeing to take part in this study, it is important that






Consent To Participate In A Research Study

A Double Blind, Randomized, Placebo-Controlled, Phase 1 Dose Escalation Trial to Evaluate the Safety and Immunogenicity of an Inactivated Yellow Fever Virus Vaccine, HydroVax-002 YFV, In Healthy Adults



Protocol No: 20-001

Version 2.0 Dated: 22Sep2021

you read and understand the following explanation. Please read this information. Ask us if there is anything that is not clear or if you would like more information. Please take your time to make your decision. You may wish to discuss the study with family, friends, and/or your own doctor. Feel free to ask any questions before you agree to take part in the study. Please tell the study doctor or study staff if you are taking part in another research study.

 and  will conduct the study, and it is sponsored by Najit Technologies, Inc., funded through the National Institutes of Health. Portions of 


WHO WILL BE MY DOCTOR DURING THIS STUDY?

If you decide to participate,  and  will be your doctors for the study and will be in contact with your regular health care provider throughout the time that you are in the study and afterwards, if needed.

WHY IS THIS STUDY BEING DONE?

This study is being done to explore patterns of immune response to an investigational vaccine against yellow fever virus (YFV). The study will be used to collect data (such as side effects) and plan for potential future studies.

Yellow fever is a virus (a germ) that is carried by mosquitos and is found in tropical and subtropical areas of Africa and South America. Yellow fever may result in a spectrum of disease, including fever, nausea, vomiting, hepatitis, hemorrhage, and renal failure and death. It is estimated that there are up to 130,000 infections and 78,000 deaths due to yellow fever each year.

The current YFV vaccine is a live-attenuated vaccine and in this country is recommended for people traveling to certain regions in Africa and South America. The YFV vaccine cannot be used in vulnerable groups, including infants (less than 9 months of age), pregnant or lactating women, or individuals over 60 years of age because of an increased potential for side effects. This leaves a large proportion of the population susceptible to yellow fever without the option of being vaccinated. The investigational YFV vaccine being tested in this study, HydroVax-002 YFV, was made by a company called Najit Technologies. The vaccine is an inactivated virus vaccine, meaning that the yellow fever virus has been killed to render it incapable of causing infection. As an example, other inactivated virus


Consent To Participate In A Research Study

A Double Blind, Randomized, Placebo-Controlled, Phase 1 Dose Escalation Trial to Evaluate the Safety and Immunogenicity of an Inactivated Yellow Fever Virus Vaccine, HydroVax-002 YFV, In Healthy Adults

Protocol No: 20-001

Version 2.0 Dated: 22Sep2021

vaccines include the seasonal influenza (flu) and polio vaccines given by injection. The study YFV vaccine has not been previously tested in humans.

The study will evaluate two different doses of the vaccine, a low dose (1 microgram) and a higher dose (5 micrograms). Some participants will receive a placebo, an inactive liquid (saline) injection instead of a vaccine injection. Each study participant will receive two injections (of the same vaccine dose or the placebo), given about four weeks apart. All study injections will be given into the muscle of the upper arm. Blood samples will be collected to measure levels of antibodies (proteins in the blood that help protect the body from disease) before and after the injections and the safety and tolerability of the vaccine will be evaluated. There is no guarantee that the study vaccine will be safe or that it will protect you from yellow fever.

HOW MANY PEOPLE WILL TAKE PART IN THIS STUDY?


Approximately 25 subjects will take part in this study. Your participation in this study will last for approximately 8 months.

WHO SHOULD TAKE PART IN THIS STUDY?

To be in the study, you should be at least 18 and less than 50 years of age and be in general good health. If you take part in this study, you must not have health conditions that weaken your body's ability to fight infections or be taking drugs that weaken the body's ability to fight infections, or have infection with HIV, hepatitis B virus, or hepatitis C virus.

If you are female and able to have children, the study doctor or study staff will perform a pregnancy test at the first study visit and before each study vaccination. If a pregnancy test is positive, you may not participate further in the study. You must not be breastfeeding or plan to breastfeed or become pregnant while participating in the study. You must have been using an acceptable method of birth control (for example, intrauterine device or hormonal methods) for at least 30 days before the first visit and agree to continue using an acceptable method of birth control until at least 30 days following the last study injection.

There may be other reasons why you cannot participate in this study. The study doctor or study staff will discuss these with you.



Consent To Participate In A Research Study

A Double Blind, Randomized, Placebo-Controlled, Phase 1 Dose Escalation Trial to Evaluate the Safety and Immunogenicity of an Inactivated Yellow Fever Virus Vaccine, HydroVax-002 YFV, In Healthy Adults

Protocol No: 20-001

Version 2.0 Dated: 22Sep2021


ARE THERE THINGS I SHOULD NOT DO WHILE PARTICIPATING IN THE STUDY?

There are some restrictions if you decide to participate in this study. You should not receive an allergy shot or inactivated (killed) vaccine, such as the flu shot or the Moderna and Pfizer COVID-19 mRNA vaccines, in the 14 days before or after a study injection. You should not receive a live vaccine (like the nasal spray influenza vaccine or the live J&J COVID-19 vaccine) in the 30 days before or after a study injection. If you participate in this study, you should not donate blood, receive blood products, or be involved in other vaccine studies or other clinical studies (involving drugs or other agents, or medical devices) while you are participating in this study. Lastly, you should not plan to do unusually vigorous exercise from 72 hours prior to administration of study vaccine or placebo or prior to a visit in which safety laboratories are being obtained (more vigorous than your usual activity – you should not run a marathon for example).

WHAT IS INVOLVED IN THIS STUDY?

You will have ten scheduled study clinic visits and four scheduled follow-up telephone calls. Ten of the study clinic visits include a blood draw. The amount of blood drawn at each visit is between 4 and 6 and a half (4-6 ½) teaspoons. Two of the visits will involve injections (of study vaccine or placebo). Women who are able to have children will have a blood pregnancy test at the first visit and a urine pregnancy test before each study injection.

The first visit is a screening visit and involves a medical history review, physical examination, and collection of blood and urine for testing. The screening visit may take up to 2 hours. If the evaluations done at the screening visit confirm that you are eligible, the first study vaccination visit will be within 45 days. At that visit, you will be assigned to receive either the low dose yellow fever virus vaccine, the higher dose yellow fever virus vaccine, or the placebo. The first 13 participants enrolled in the study will receive either the low dose yellow fever virus vaccine or placebo and the second 12 participants enrolled in the study will receive either the higher dose yellow fever virus vaccine or placebo. Of the 25 people in the study, 20 will receive yellow fever virus vaccine and 5 will receive placebo. This will be randomly decided (drawing numbers from a hat). Neither you nor the study doctor or study staff will be able to pick which study group you are in. Neither you nor the study doctor nor study staff will know whether you were assigned to get vaccine or placebo; only the study staff member who gives you the study injection will know. The study doctor can find out which group you were assigned to if it is necessary to know for your health. If this happens, the study doctor may not be able to tell you which group you were in until everyone finishes the study.



Consent To Participate In A Research Study

A Double Blind, Randomized, Placebo-Controlled, Phase 1 Dose Escalation Trial to Evaluate the Safety and Immunogenicity of an Inactivated Yellow Fever Virus Vaccine, HydroVax-002 YFV, In Healthy Adults

Protocol No: 20-001

Version 2.0 Dated: 22Sep2021

After the first study injection, you will come back to the clinic 3 and 14 days later for follow-up visits, 28 days later for the second study vaccination visit, and 3, 14, 28, 56, and 179 days after the second study vaccination for follow-up visits. You will also have scheduled telephone contacts the day after and week after each study vaccination visit. Each of these visits are described in more detail below.

While you are in the study, you must:

Follow the instructions you are given.

Come to the study center for all visits with the study doctor or study staff.

Tell the study doctor or study staff about any changes in your health or the way you feel.

Tell the study doctor or study staff if you want to stop being in the study at any time.

The study activities are described further in the following.

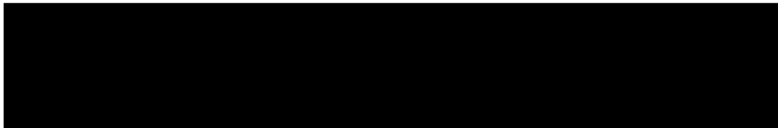
Visit 1 (Screening Visit)

The study doctor or study staff will screen you to see if you are eligible for to take part in this study. At this visit, research staff will talk to you about the study plan. If you decide to participate, you will be asked to sign this consent form. No screening activities will occur until you decide that you want to participate and sign/date this form. This visit may take up to 2 hours.

Once you sign and date this form, the study staff will ask you about your health, medications and medical history. They will also measure your height, weight, temperature, blood pressure and heart rate. The study doctor or other licensed health professional study staff will do a physical examination.

Next, study staff will collect blood and urine samples from you. The blood tests will include blood counts and tests for kidney and liver function. In addition, some of the blood will be used to test for antibodies to the yellow fever virus. The urine tests will include tests to see if you have sugar (glucose) or protein in your urine. The test results must be within normal range for you to be allowed to participate in the study and to receive the first study vaccination.

The blood testing will also include tests for HIV (human immunodeficiency virus, which is the virus that causes the acquired immunodeficiency syndrome [AIDS]) hepatitis B and hepatitis C (which both cause damage to your liver). The study doctor or study staff will provide pre-test counseling for these tests so you will have information about the risks and benefits of being tested. You will be notified of the results of the testing, and counseled as to the meaning of the results, whether they are positive or negative. If



Consent To Participate In A Research Study

A Double Blind, Randomized, Placebo-Controlled, Phase 1 Dose Escalation Trial to Evaluate the Safety and Immunogenicity of an Inactivated Yellow Fever Virus Vaccine, HydroVax-002 YFV, In Healthy Adults

Protocol No: 20-001

Version 2.0 Dated: 22Sep2021

the test indicates that you are infected with HIV or Hepatitis, you will receive additional counseling about the significance of your care and possible risks to other people. We are required to report all positive results to the North Carolina Division of Public Health. The test results will be kept confidential to the extent permissible under the law. If you do not want to be tested for HIV or Hepatitis, then you should not agree to participate in this study.

In rare cases, an HIV test result may be ‘indeterminate’, which means that it is not possible to say if it is positive or negative. This can occur for a number of reasons and most people with indeterminate tests do not have HIV. Indeterminate tests are not notifiable conditions and this information is not reported to the local health department.

Women who are able to have children will also be asked about their contraceptive methods, if applicable, and all will have a blood pregnancy test. The pregnancy test must be negative in order for you to be in the study. The study doctor or study staff will tell you if the pregnancy test is positive. The study doctor or study staff will provide counseling on avoidance of pregnancy while you are in the study.

Visit 2 - Study Vaccination Visit (must occur within 45 days after the Screening Visit)

If the evaluations done at the screening visit indicate that you are able to receive the study vaccine, you will be scheduled for the first study vaccination visit. This visit may take up to 3 hours.

Before you receive the study vaccine, you will be asked about any changes in your medical condition or medications you have taken since the screening visit. Study staff will measure your temperature, blood pressure, and heart rate. You may have a physical exam if the study doctor thinks that it is necessary. If you have a fever, the study vaccination may be delayed.

Women who are able to have children will also be asked about their contraceptive methods, if applicable, and all will have a urine pregnancy test. The pregnancy test must be negative in order for you to receive the study injection. (The study doctor or study staff will tell you if the pregnancy test is positive.) The study doctor or study staff will provide counseling on avoidance of pregnancy while you are in the study.

You will be assigned to receive low dose yellow fever virus vaccine, higher dose yellow fever virus vaccine or placebo and you will receive an injection into the muscle of your upper arm. You will need to stay in the study clinic for at least 30 minutes after you receive the vaccine to be watched for any




Consent To Participate In A Research Study

A Double Blind, Randomized, Placebo-Controlled, Phase 1 Dose Escalation Trial to Evaluate the Safety and Immunogenicity of an Inactivated Yellow Fever Virus Vaccine, HydroVax-002 YFV, In Healthy Adults

Protocol No: 20-001

Version 2.0 Dated: 22Sep2021

reactions. Study staff will look at your arm and the site of the shot before you leave. You will be given a Memory Aid worksheet (diary), ruler, and thermometer, and shown how to use them for the study. You will be asked to write down your temperature and any symptoms that you experience every day, starting the evening of the study vaccination, and continuing for the next 7 days. You should also write down any drugs or medicines you take during this time, even over-the-counter medicines such as Tylenol®. You should contact the study staff if you have any severe reactions in the week after the study injection. These reactions are described later in this form.

Telephone Contact: The day after and week after the first study vaccination, study staff will contact you by telephone to remind you to fill out the Memory Aid worksheet and to ask you about any reactions you may have had and any medications you may have taken since receiving the study injection. These calls may take up to 15 minutes to conduct.


Visits 3 and 4 - Clinic Follow-up Visits in the Two Weeks after the First Vaccination

You will be asked to come back to the study clinic for follow-up visits at 3 and 14 days after the first study vaccination. These visits may last up to 30 minutes. Study staff will review the Memory Aid worksheet with you. You will be asked about any reactions you may have had, any changes in your health history, and any medications you may have taken since receiving the study injection. Study staff will measure your temperature, blood pressure, and heart rate and will check the area on your arm where you got the study vaccination and may do a further physical exam based on your health history. The study doctor or study staff will provide counseling on avoidance of pregnancy while you are in the study.

Blood samples will be taken at each of these visits. The blood tests will include standard tests that will give information about your general health, including measures of your blood counts and tests for kidney and liver function. Blood samples collected at the visit 14 days after vaccination will be tested to measure levels of antibodies to the yellow fever virus. The blood sample from the first of the two visits will also be tested to confirm that the yellow fever virus is not in the blood. At the visit 14 days after vaccination a urine sample will be collected for tests to see if you have any sugar (glucose), blood, or protein in your urine.

Visit 5 - Second Study Vaccination Visit (28 days after the first study vaccination visit)

About 28 days after the first vaccination visit, you will return for the second study vaccination visit. This visit may take up to 3 hours. Study staff will again review the study inclusion/exclusion criteria



Consent To Participate In A Research Study

A Double Blind, Randomized, Placebo-Controlled, Phase 1 Dose Escalation Trial to Evaluate the Safety and Immunogenicity of an Inactivated Yellow Fever Virus Vaccine, HydroVax-002 YFV, In Healthy Adults

Protocol No: 20-001

Version 2.0 Dated: 22Sep2021

with you to make sure that you still qualify to receive the study vaccine. You will be asked about your health and any medicines you are taking. Study staff will measure your temperature, blood pressure, and heart rate. A study doctor or other licensed study staff member may do a physical exam based on your health history.

Blood samples will be taken for testing. The blood tests will include standard tests that will give information about your general health, including measures of your blood counts and tests for kidney and liver function, and tests to measure levels of antibodies to the yellow fever virus.


A urine sample will be collected for tests to see if you have any sugar (glucose), blood, or protein in your urine. Women who are able to have children will be asked about their contraceptive methods, if applicable, and all will have a urine pregnancy test. The pregnancy test must be negative in order to receive the study injection. The study doctor or study staff will provide counseling on avoidance of pregnancy while you are in the study.

You will receive a study vaccination at this visit. It will be the same dose as you received on the first vaccination visit. The study vaccine will be administered into the muscle of your upper arm. You will need to stay in the study clinic for at least 30 minutes after that to be watched for any reactions. Study staff will look at your arm and the site of the shot before you leave. You will be given a Memory Aid worksheet, ruler, and thermometer, and reminded about how to use them for the study. You will be asked to write down your temperature and any symptoms that you have every day, starting the evening of the vaccination, and continuing for the next 7 days. You should also write down any drugs or medicines you take during this time, even over-the-counter medicines such as Tylenol®. You should contact the study staff if you have any severe reactions in the week after the study injection.

Telephone Contact: The day after and week after the second study vaccination, study staff will contact you by telephone to remind you to fill out the Memory Aid worksheet and to ask you about any reactions you may have had and any medications you may have taken since receiving the study injection.

Visits 6 and 7 - Study Clinic Follow-up Visits in the Two Weeks after the Second Vaccination

You will be asked to come back to the study clinic for follow-up visits at 3 and 14 days after the second study vaccination. These visits may take up to 30 minutes. Study staff will review the Memory Aid worksheet with you. You will be asked about any reactions you may have had, any changes in your health history, and any medications you may have taken since receiving the study injection. Study staff


Consent To Participate In A Research Study

A Double Blind, Randomized, Placebo-Controlled, Phase 1 Dose Escalation Trial to Evaluate the Safety and Immunogenicity of an Inactivated Yellow Fever Virus Vaccine, HydroVax-002 YFV, In Healthy Adults

Protocol No: 20-001

Version 2.0 Dated: 22Sep2021

will measure your temperature, blood pressure, and heart rate and will check the area on your arm where you got the study vaccination and may do a further physical exam based on your health history. The study doctor or study staff will provide counseling on avoidance of pregnancy while you are in the study.

At these visits, blood samples will be taken for testing. The blood tests will include standard tests that will give information about your general health, including measures of your blood counts and tests for kidney and liver function. Blood samples collected at the visit 14 days after vaccination will be tested to measure levels of antibodies to the yellow fever virus. Blood samples from the first of these two visits will also be tested to confirm that the yellow fever virus is not in the blood. At the visit 14 days after vaccination a urine sample will be collected for tests to see if you have any sugar (glucose), blood, or protein in your urine.

Visits 8, 9, and 10 - Final Three Study Clinic Visits


The final three study clinic visits will take place about 28, 56, and 180 days after the second study vaccination. These visits may take up to 30 minutes. At the visit 28 days after vaccination you will be asked about any reactions you may have had, any changes in your health history, and any medications you may have taken since receiving the study injection. Study staff may measure your temperature, blood pressure, and heart rate. The study doctor or another licensed study staff member may do a further physical exam based on your health history.

At the visits 56 and 180 days after vaccination, you will be asked about any changes in your health history. Study staff may measure your temperature, blood pressure, and heart rate. The study doctor or another licensed study staff member may do a further physical exam based on your health history.

At each of the final three study clinic visits, blood samples will be taken for testing to measure levels of antibodies to yellow fever virus.

Early Withdrawal Visit

If you stop taking part in this study for any reason, you may be asked to return to the study center for a final visit. You will be asked about any reactions or illnesses you may have had and you may be asked about any medications you may have taken since your last study clinic visit. A brief physical examination may be done and a blood sample may be taken.


Consent To Participate In A Research Study

A Double Blind, Randomized, Placebo-Controlled, Phase 1 Dose Escalation Trial to Evaluate the Safety and Immunogenicity of an Inactivated Yellow Fever Virus Vaccine, HydroVax-002 YFV, In Healthy Adults

Protocol No: 20-001

Version 2.0 Dated: 22Sep2021

Unscheduled Visit

You may be asked to come back to the study center at other times if needed to review your health. The study doctor will determine what activities will be needed after reviewing any symptoms that you are having.

Laboratory Testing of Blood Specimens

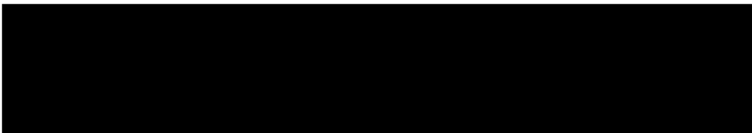
The blood specimens collected from you will be used for two types of tests—clinical tests to assess your health and research tests related to yellow fever virus. The clinical tests will include measures of your blood counts and kidney and liver function and tests for HIV, hepatitis B and hepatitis C. The blood specimens sent to the clinical laboratory for testing at Duke and will be labeled with your name, medical record number and birthdate. They must be labeled in this way for Duke to be able to complete the testing and report it back to the study physician. These lab results will become a part of the clinical medical record. This will also include the serum pregnancy test results, if you are a woman of childbearing potential.

The research tests will measure levels of antibodies to yellow fever virus and will identify whether yellow fever virus is present in the blood samples. Giving blood samples for these tests will not benefit you. The results of these tests are useful only for research purposes. Your individual results will not be available to you or your regular doctor.

Blood specimens for the research tests will be sent to a central testing laboratory. Those blood specimens will not be identified by your name or other identifying information. They will be labeled only with a barcode and a unique tracking number in order to help protect your confidentiality. Personnel at the central testing laboratory will not know your identity, or even the ID code you were assigned for the study.

A part of each coded blood sample may be stored indefinitely at a site determined by Najit. The stored samples will be labeled only by study subject number and will not be labeled with your name or initials, or any other information that could identify you readily, and will be kept confidential to the best of the sponsor's ability within state and federal law.

There is the possibility that these stored samples may be useful for future research. These samples might be used in new or different laboratory tests, to provide information for the development of new vaccines, or for studies of yellow fever virus or other infections. The samples may be shared with researchers at


Consent To Participate In A Research Study

A Double Blind, Randomized, Placebo-Controlled, Phase 1 Dose Escalation Trial to Evaluate the Safety and Immunogenicity of an Inactivated Yellow Fever Virus Vaccine, HydroVax-002 YFV, In Healthy Adults

Protocol No: 20-001

Version 2.0 Dated: 22Sep2021

other institutions. All serum samples will be used only for research purposes; the samples will not be sold or used directly for production of any commercial product. Serum samples obtained in this study may result in the development of a product that could be patented or licensed. There are no plans to provide financial compensation to you should this occur. No genetic testing will be performed. There are no benefits to you in the collection, storage and future research use of specimens. The results of any future testing will be kept confidential in the same way as the results of testing done for this study, which you will read about later in this form in the section titled "Confidentiality."

If you do not want your blood to be stored or used as described in this section, you should not participate in this study.


Ask the study doctor or study staff if you have questions about how your blood samples may be used. The total volume of blood drawn for the entire study will be approximately 250 mL (or about eight ounces, which is approximately 1 cup). For comparison, when people volunteer to donate blood, the volume is about 250-450 mL at one time.

WHAT ARE THE RISKS OF THIS STUDY?

While on the study, you are at risk for some side effects. You should discuss these with the study doctor or study staff. Many side effects go away shortly after a vaccine is given, but in some cases, side effects can be serious, long lasting, or permanent. The yellow fever virus study vaccine has never been tested in humans. There may be risks that we do not know about, which include your health getting worse or even death.

The potential risks and discomforts of this study include having blood drawn, injection of the study vaccine or placebo into the muscle of the upper arm, and possible reactions to the study vaccines.

Having your blood taken or getting an injection can cause discomfort and may also cause lightheadedness or fainting. Taking blood can cause bruising. Bruising can be prevented or reduced by putting pressure on the site for a few minutes after the blood is taken. It is possible to get an infection at the site of the needle stick where the study doctor or study staff take your blood or give you the shot of study vaccine. To reduce the risk of infection, the study doctor or study staff will wipe the area clean with alcohol and use sterile equipment.


Consent To Participate In A Research Study

A Double Blind, Randomized, Placebo-Controlled, Phase 1 Dose Escalation Trial to Evaluate the Safety and Immunogenicity of an Inactivated Yellow Fever Virus Vaccine, HydroVax-002 YFV, In Healthy Adults

Protocol No: 20-001

Version 2.0 Dated: 22Sep2021

A small number of people (about 1 in 4 million people) who get a vaccine have an immediate allergic reaction, called anaphylaxis (also known as allergic shock). This type of reaction may include symptoms such as:

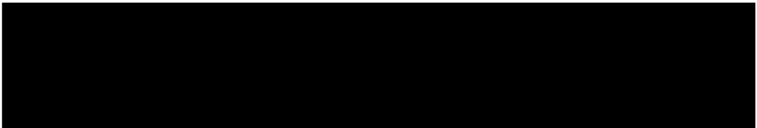
- skin rash (hives)
- sweating
- a feeling of dread
- swelling around the mouth, throat and eyes
- wheezing
- difficulty breathing
- increased pulse
- fainting or feeling dizzy due to a drop in blood pressure
- inability to breathe without assistance

These events usually occur soon after vaccination. For this reason, we will observe you for 30 minutes after the vaccination. If these reactions occur, emergency medications administered by study personnel can usually stop them. Most people who experience anaphylaxis recover completely. Rarely, people can die.

This is the first study of HydroVax-002 YFV vaccine in people and so the vaccination side effects for this vaccine when given to people are not known. Other vaccines that have inactivated (killed) viruses that are similar to yellow fever virus have caused local reactions at the injection site, such as redness, swelling, pain, itching, and bruising as well as more general symptoms such as headache, muscle aches joint aches, and body aches. Other symptoms, such as fever, feverishness, tiredness, fatigue, chills, and nausea may occur after vaccination.

Please tell the study doctor or study staff right away if you have any side effects. Please tell them if you have any other problems with your health or the way you feel during the study, whether or not you think these problems are related to the study vaccine.

Ask the study doctor if you have questions about the signs or symptoms of any side effects that you read about in this consent form.



Consent To Participate In A Research Study

A Double Blind, Randomized, Placebo-Controlled, Phase 1 Dose Escalation Trial to Evaluate the Safety and Immunogenicity of an Inactivated Yellow Fever Virus Vaccine, HydroVax-002 YFV, In Healthy Adults

Protocol No: 20-001

Version 2.0 Dated: 22Sep2021

There is a risk of loss of confidentiality of your information. You will read more about the protection of your information later in this form. Please ask the study doctor or study staff if you would like to know more about how your information will be protected while you are in this study.

For women participating in the study:

If you are a woman, you cannot be in this study if you are:

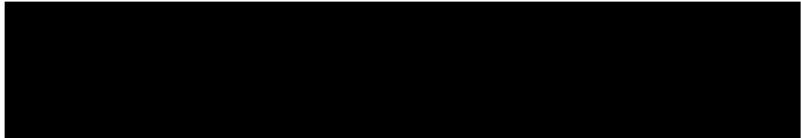
- pregnant
- planning to become pregnant during the study
- nursing a child

If you become pregnant within 30 days of receiving a study vaccine, it could be dangerous for the baby. Nobody knows what all of these risks are right now. Some vaccines and drugs could cause women to have their babies prematurely (early) or to have babies with birth defects.

Female Risks

Being a part of this study while pregnant may expose the unborn child to significant risks, some of which may be currently unforeseeable. Therefore, pregnant women will be excluded from the study. If you are a woman of childbearing potential, a blood pregnancy test will be done (using 1 teaspoon of blood drawn from a vein by needle-stick), and it must be negative before you can continue in this study. If sexually active, you must agree to use appropriate contraceptive measures for the 30 days before you receive the first study vaccination until 30 days after you receive your second vaccination. Highly effective methods include (a) partner vasectomy, (b) bilateral tubal ligation, (c) intrauterine devices (IUDs), (d) hormonal implants (such as Implanon), or (e) other hormonal methods (birth control pills, injections, patches, vaginal rings). If you and your partner are not currently using one of these methods your study doctor will discuss options with you, given your medical condition, your personal preferences, and the level of effectiveness required for this study. Because no birth control method is 100% effective, you should notify your study doctor immediately if you think there is any chance you could be pregnant, even if you have had a recent negative pregnancy test.

If you do become pregnant during the study, your study doctor will stop the study drug, withdraw you from the study, and notify the sponsor. You will be followed for the duration of the pregnancy to better understand the potential effects of the study drug on pregnancy outcomes.



Consent To Participate In A Research Study

A Double Blind, Randomized, Placebo-Controlled, Phase 1 Dose Escalation Trial to Evaluate the Safety and Immunogenicity of an Inactivated Yellow Fever Virus Vaccine, HydroVax-002 YFV, In Healthy Adults

Protocol No: 20-001

Version 2.0 Dated: 22Sep2021

Male Risks

If you are able to father children and your partner is a woman who could possibly become pregnant (she has not completed menopause, or has not had a hysterectomy and/or both tubes and/or both ovaries removed), you must agree to either abstain completely from vaginal intercourse for 30 days after your last dose of study vaccine, or use a condom every time you have vaginal intercourse, even if you have had a vasectomy (because vasectomy does not prevent transmission of drug in semen). If your partner is currently pregnant, breastfeeding, or becomes pregnant during the study, you must use a condom for all types of intercourse to prevent transmission.

If you or your partner should become pregnant while you are in this study, you should report this immediately to the study staff. With your permission, the study doctor or study staff will ask about your health and the outcome of your pregnancy. The study doctor may share this information with the sponsor and the IRB, a group of people who review research studies to protect the rights and welfare of research participants.

There may be risks, discomforts, drug interactions or side effects that are not yet known.


ARE THERE BENEFITS TO TAKING PART IN THIS STUDY?

If you agree to take part in this study, no direct medical benefit is expected. We do not know whether the yellow fever virus vaccine will help to protect you from yellow fever virus disease or, if it does, how long that protection may last. We hope that in the future the information learned from this study will benefit other people.

WILL MY INFORMATION BE KEPT CONFIDENTIAL?

Participation in research involves some loss of privacy. We will do our best to make sure that information about you is kept confidential, but we cannot guarantee total confidentiality. Your personal information may be viewed by individuals involved in this research and may be seen by people including those collaborating, funding, and regulating the study. We will share only the minimum necessary information in order to conduct the research. Your personal information may also be given out if required by law.

As part of the study, results of your study-related laboratory tests and study-related procedures may be reported to Najit Technologies and the NIH and its affiliates. In addition, your records may be reviewed



Consent To Participate In A Research Study

A Double Blind, Randomized, Placebo-Controlled, Phase 1 Dose Escalation Trial to Evaluate the Safety and Immunogenicity of an Inactivated Yellow Fever Virus Vaccine, HydroVax-002 YFV, In Healthy Adults

Protocol No: 20-001

Version 2.0 Dated: 22Sep2021

in order to meet federal or state regulations. Reviewers may include representatives from the Food and Drug Administration, representatives and affiliates of Najit Technologies and the NIH, the Duke University Health System Institutional Review Board, and others as appropriate. If any of these groups review your research record, they may also need to review your entire medical record.

All of the blood and urine studies are being done only because you are in this study. The study results for labs processed locally, will be available in your medical record. Laboratory results that are sent out of DUHS, will not be a part of your research or medical record.

The Department of Health and Human Services (HHS) has issued a Certificate of Confidentiality to further protect your privacy. With this Certificate, the investigators may not disclose research information that may identify you in any Federal, State, or local civil, criminal, administrative, legislative, or other proceedings, unless you have consented for this use. Research information protected by this Certificate cannot be disclosed to anyone else who is not connected with the research unless:

- 1) there is a law that requires disclosure (such as to report child abuse or communicable diseases but not for legal proceedings)
- 2) you have consented to the disclosure, including for your medical treatment; or
- 3) the research information is used for other scientific research, as allowed by federal regulations protecting research subjects

Disclosure is required, however, for audit or program evaluation requested by the agency that is funding this project or for information that is required by the Food and Drug Administration (FDA).

You should understand that a Confidentiality Certificate does not prevent you or a member of your family from voluntarily releasing information about yourself or your involvement in this research. If you want your research information released to an insurer, medical care provider, or any other person not connected with the research, you must provide consent to allow the researchers to release it. This means that you and your family must also actively protect your own privacy.

Finally, you should understand that the investigator is not prevented from taking steps, including reporting to authorities, to prevent serious harm to yourself or others.

The study results will be retained in your research record for at least six years after the study is completed. At that time either the research information not already in your medical record may be



Consent To Participate In A Research Study

A Double Blind, Randomized, Placebo-Controlled, Phase 1 Dose Escalation Trial to Evaluate the Safety and Immunogenicity of an Inactivated Yellow Fever Virus Vaccine, HydroVax-002 YFV, In Healthy Adults

Protocol No: 20-001

Version 2.0 Dated: 22Sep2021


destroyed or information identifying you will be removed from such study results at DUHS. Any research information in your medical record will be kept indefinitely.

This information may be further disclosed by the sponsor of this study. If disclosed by the sponsor, the information is no longer covered by federal privacy regulations. If this information is disclosed to outside reviewers for audit purposes, it may be further disclosed by them and may not be covered by federal privacy regulations.


While the information and data resulting from this study may be presented at scientific meetings or published in a scientific journal, your name or other personal information will not be revealed.

Some people or groups who receive your health information might not have to follow the same privacy rules. Once your information is shared outside of DUHS, we cannot guarantee that it will remain private. If you decide to share private information with anyone not involved in the study, the federal law designed to protect your health information privacy may no longer apply to the information you have shared. Other laws may or may not protect sharing of private health information.

WHAT ARE THE COSTS?

You or your insurance provider will be responsible and billed for all costs related to your routine medical care, including copayments and deductibles. Routine medical care services are those that you would have received for your condition if you were not participating in this research study. Not all services are covered by insurance. Some procedures or scans may require pre-authorization by your insurance plan. We will notify you if we learn that a service is not covered by your insurance plan as part of the pre-authorization process. If it is not covered, you will be responsible for paying for it. The amount of your out-of-pocket expense will depend on your insurance plan. For beneficiaries with Medicare Advantage Plans, traditional Medicare is billed for the routine cost of a research study. You may have more or higher co-pays than with a Medicare Advantage plan. Please discuss the costs of the study with . At your request, a Financial Counselor in the clinic may provide you with an estimate of costs for routine services.

We will monitor your DUHS patient care charges to make sure that costs are directed appropriately. If you have any questions or concerns about appropriate billing, contact your study team coordinator so that he/she can help find a resolution.



Consent To Participate In A Research Study

A Double Blind, Randomized, Placebo-Controlled, Phase 1 Dose Escalation Trial to Evaluate the Safety and Immunogenicity of an Inactivated Yellow Fever Virus Vaccine, HydroVax-002 YFV, In Healthy Adults

Protocol No: 20-001

Version 2.0 Dated: 22Sep2021



WHAT ABOUT COMPENSATION?

You will be reimbursed up to \$675 for your expenses related to your participation (parking, gas and time). You will receive \$75 for the screening visit and both treatment visits, \$50 for each follow-up study visit and \$25 for each telephone call. You will only receive compensation for the study activities that are completed. If you are asked to return for an unscheduled visit due to complication or otherwise, you will be compensated \$50/visit.

Payment received as compensation for participation in research is considered taxable income to the research subject. If payment to an individual totals \$600 or more in any one calendar year, Duke University is required to report this information to the Internal Revenue Service (IRS). Research subject payments to a non-employee of Duke University adding up to \$600 or more during any calendar year will result in a 1099 (Miscellaneous Income) form being issued to the individual and a copy sent to the IRS.

WHAT ABOUT RESEARCH RELATED INJURIES?

Immediate necessary medical care is available at Duke University Medical Center in the event that you are injured as a result of your participation in this research study. However, there is no commitment by Duke University, Duke University Health System, Inc., or your Duke physicians to provide monetary compensation or free medical care in the event of a study-related injury.

For questions about the study or research-related injury, contact  during regular business hours and page him at  after hours and on weekends and holidays.

WHAT ABOUT MY RIGHTS TO DECLINE PARTICIPATION OR WITHDRAW FROM THE STUDY?

You may choose not to be in the study, or, if you agree to be in the study, you may withdraw from the study at any time. If you withdraw from the study, no new data about you will be collected for study purposes unless the data concern an adverse event (a bad effect) related to the study. If such an adverse event occurs, we may need to review your entire medical record. All data that have already been collected for study purposes, and any new information about an adverse event related to the study, will be sent to the study sponsor.

Your decision not to participate or to withdraw from the study will not involve any penalty or loss of benefits to which you are entitled, and will not affect your access to health care at Duke. If you do



Consent To Participate In A Research Study

A Double Blind, Randomized, Placebo-Controlled, Phase 1 Dose Escalation Trial to Evaluate the Safety and Immunogenicity of an Inactivated Yellow Fever Virus Vaccine, HydroVax-002 YFV, In Healthy Adults

Protocol No: 20-001

Version 2.0 Dated: 22Sep2021

decide to withdraw, we ask that you contact [REDACTED] in writing and let him know that you are withdrawing from the study. His mailing address is [REDACTED].

We will tell you about new information that may affect your health, welfare, or willingness to stay in this study.

Your doctor may decide to take you off this study if you have serious side effects, or if your study doctor determines that it is no longer in your best interest to continue. The sponsor or regulatory agencies may stop this study at any time for any reason without your consent. If this occurs, you will be notified and your study doctor will discuss other options with you.

If you stop the study early for one of the reasons noted above, the study doctor or study staff may ask you some questions about being in the study. To help you leave the study safely, the study doctor may ask you to continue follow up visits or to have additional tests.

The use of your data and samples may result in commercial profit. You will not be compensated for the use of your data and samples other than what is described in this consent form.

A description of this clinical trial will be available on <https://clinicaltrials.gov/> as required by U.S. Law. This Web site will not include information that can identify you. At most, the Web site will include a summary of the results. You can search this Web site at any time.

WHOM DO I CALL IF I HAVE QUESTIONS OR PROBLEMS?

If you have questions about the study or an injury related to the research, or if you have problems, concerns or suggestions about the research, contact [REDACTED] during regular business hours at [REDACTED]. After hours and on weekends and holidays, page [REDACTED].

If you have questions about your rights as a research participant or to discuss problems, concerns or suggestions related to the research, or to obtain information or offer input about the research, you may contact: Duke University Health System Institutional Review Board (IRB) at [REDACTED]



Consent To Participate In A Research Study

A Double Blind, Randomized, Placebo-Controlled, Phase 1 Dose Escalation Trial to Evaluate the Safety and Immunogenicity of an Inactivated Yellow Fever Virus Vaccine, HydroVax-002 YFV, In Healthy Adults

Protocol No: 20-001

Version 2.0 Dated: 22Sep2021

STATEMENT OF CONSENT

"The purpose of this study, procedures to be followed, risks and benefits have been explained to me. I have been allowed to ask questions, and my questions have been answered to my satisfaction. I have been told whom to contact if I have questions, to discuss problems, concerns, or suggestions related to the research, or to obtain information or offer input about the research. I have read this consent form and agree to be in this study, with the understanding that I may withdraw at any time. I have been told that I will be given a signed and dated copy of this consent form."

Signature of Subject

Date

Time

Signature of Person Obtaining Consent

Date

Time