STUDY NUMBER: 16-I-0147

Page 1 of 9

HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA

CONSENT TO PARTICIPATE IN A RESEARCH STUDY AND RESEARCH SUBJECT HIPAA AUTHORIZATION

Protocol Title:	VRC 607: A Phase 1, Single Dose Study of the Safety and Virologic Effect of a Human Monoclonal Antibody, VRC-HIVMAB080-00-AB (VRC01LS), with Broad HIV-1 Neutralizing Activity, Administered Intravenously to HIV-Infected Adults.
Principal Investigator:	Pablo Tebas, MD 502 Johnson Pavilion, Philadelphia PA 19104 (215) 349-8092
Lead Study Nurse:	Carol DiGiorgio, RN
Research Team:	Yan Jiang, RN, BSN, MSN Eileen Donaghy, MSN, CRNP
24 hr. Emergency Contact:	Immunodeficiency Program Doctor on call (215) 662-6059

INTRODUCTION

We invite you to take part in a research study at the University of Pennsylvania.

First, we want you to know that:

Taking part in NIH research is entirely voluntary.

You may choose not to take part, or you may withdraw from the study at any time. In either case, you will not lose any benefits to which you are otherwise entitled.

You may receive no benefit from taking part. The research may give us knowledge that may help people in the future.

Second, some people have personal, religious or ethical beliefs that may limit the kinds of medical or research treatments they would want to receive (such as blood transfusions). If you have such beliefs, please discuss them with your health care provider or research team before you agree to the study.

Now we will describe this research study. Before you decide to take part, please take as much time as you need to ask any questions and discuss this study with the research team at PENN, or with family, friends or your personal physician or other health professional.

PURPOSE AND PLAN OF THE STUDY

This is the study of an experimental product called "VRC01LS". The U.S. Food and Drug Administration (FDA) allows it to be used for research only. VRC01LS is an antibody directed against HIV virus. The human body uses antibodies as one way to help fight infection. The main purpose of this study is to see if the experimental product VRC01LS is safe and well tolerated. We will study the amount of VRC01LS in the body and how it changes over time. We will check to see if people who get VRC01LS develop immune response (antibody) to VRC01LS.

About 10 to 20 people will participate in this study at the NIH Clinical Center in Bethesda, Maryland and the Hospital of the University of Pennsylvania, Philadelphia, PA. The study will have about 23 clinic visits during a 48 week period.

STUDY NUMBER: 16-I-0147

CONTINUATION: Page 2 of 9

STUDY PRODUCT

VRC01LS is a monoclonal antibody ("MAb"). "Monoclonal" means that all the antibodies in the product are the same. The formal name for the product is "VRC-HIVMAB080-00-AB." As of February 7, 2017, 36 subjects have received one or more administrations of VRC01LS without serious side effects.

VRC01LS is a new version of the monoclonal antibody VRC01 that has been given to over 840 healthy and HIV-infected adults and has been found to be safe and well-tolerated. VRC01LS is identical to VRC01 except for a small structural change. The purpose of this change is to make VRC01LS last longer in the body. As expected, early results from another VRC study that is testing VRC01LS at the 40mg/kg IV dose in adults without HIV infection show that the antibody may still be detected in the subject's samples at the last study visit (168 days).

VRC01LS is a human antibody and a synthetic product based on an antibody that was first found in an HIV-infected person. Although the antibody was found in a human, the product is not made by collecting it from a human. VRC01LS was developed by the Vaccine Research Center (VRC), NIH and made in a drug manufacturing laboratory. There is currently a study of VRC01LS in 36 adults without HIV infection. This is the first study to give VRC01LS to HIV infected humans.

There is currently no cure for HIV.

In laboratory and animal studies, VRC01LS was shown to attach to and inactivate many types of HIV viruses. It is not known if the product will act the same way when given to humans. It will take many studies to learn if the product will be useful for preventing or treating HIV. This study alone will not answer this question.

ELIGIBILITY

You are eligible to participate in this study because you have completed the screening process and you are:

- 18 to 70 years old
- HIV infected, but otherwise in good general health and without significant medical problems as determined at screening
- Willing to maintain or establish a relationship with a primary care provider for management of HIV while participating in the study
- Willing to receive VRC01LS
- Willing to donate blood samples for future research
- Willing to use birth control for the duration of the study, if female and able to become pregnant

STUDY PROCEDURES

About 10-20 people will take part in this study. All participants will get VRC01LS by the intravenous (IV) route, meaning into a vein using a needle; getting VRC01LS will take about 30 minutes. You will have several blood samples collected over several hours after you get VRC01LS. There are other blood draws which are optional and if you choose to get these blood draws, you will be admitted to the hospital for an overnight stay. Other clinic visits during the study will take about 2 hours.

If you agree to take part in this study, you will get 1 dose of VRC01LS and the amount of study product will be based on your own body weight. We will measure your weight on the day the study product is given to calculate the dose. If you are female and able to become pregnant, a pregnancy test will be done before we begin and the result of the test must be negative for you to get the study product.

For the VRC01LS IV infusion, we will place a thin tube or IV line in a vein on your arm on the day you get the study product. If possible, we will place a second IV line in the vein of your other arm for blood sample collection. VRC01LS will be mixed into a bag of sterile liquid called "normal saline" or "salt water." The mix of normal saline and VRC01LS will be given directly into your vein. A pump will control how fast the study product goes into the vein. The goal is to give it over about 30 minutes. If you have side effects, the rate of the infusion may be slowed down or stopped. At the end of the infusion(s) we will monitor you for 30 minutes and then begin collecting blood samples.

STUDY NUMBER: 16-I-0147

CONTINUATION: Page 3 of 9

We will collect blood samples from you before the infusion, at the end of the infusion and at 30 minutes, 1, 2, 3, 4, 24 hours after you get VRC01LS. After you get the study product, you will need to come back to the clinic again 10 times over the next 4 weeks for blood draws. After that, the follow up visits will be more spread out through week 48 for a total of 23 study visits.

If you agree give any optional blood samples, these will be collected at 8, 12 and 36 hours. We will not record your decision. You will not lose any benefits if you choose not to give the optional blood samples.

For 3 days after you get the study product, we will ask you to check your temperature with a thermometer we give you and write it down. We will ask you to write down any symptoms you may have. You will get a password to a secure website to record this information on an electronic form or "diary". You can choose to use a paper diary instead. If you have any side effects, you should tell a study physician or a nurse as soon as possible. You can reach the clinic staff by phone 24 hours a day. If you have symptoms, you may be asked to come into the clinic for an examination before your next scheduled visit. It is very important that you follow the instructions you get from the clinic staff.

At each visit, we will check you for any health changes or problems. We will ask you how you are feeling and if you have taken any medications. We will draw your blood at scheduled study visits and we will tell you right away if any of your test results show a health problem. We will use some blood samples to study if your body forms an immune response (antibody) to the study product. Results of these tests are not for checking on your health and we will not give you these results during the study. We may ask you to come into clinic for additional blood collection.

Experimental studies follow a set schedule. This helps us answer the research questions. It is important that you work with the staff to follow your scheduled visits, but there is some flexibility. You should try not to miss any visits.

We will draw about 1 to 11 tubes of blood from you at each visit, depending on the type of visit. You might need to have extra clinic visits and laboratory tests if you have health changes that need to be checked.

HIV TESTING AND MANAGEMENT

Everyone in this study has HIV infection. As you take part in this study, you will have frequent testing of your HIV viral load and CD4+ T cell count for research purposes. The results of these tests will be given to you during the study. If you have any questions about management of your HIV infection, you should discuss them with your physician. With your approval, we can provide copies of your viral load and CD4 count tests to you and/or your physician.

Your personal information may be given out if required by law. If a CD4 or HIV viral load is done at a study visit, by law we have to report the result to the City of Philadelphia Health Department/PA Department of Health. We would report your name, gender, racial/ethnic background, and the month and year you were born. This is to keep track of how many people in the U.S. have HIV infection. It is also to make sure that states get enough money from the federal government to support the medical care of people living with HIV. The Health Department does not share the names of HIV infected people with anyone else. It removes all personal identifiers, such as your name, before giving information on the number of HIV infections to the federal government

This study does not include standard medical care or the management of your HIV infection. The Department of Human Services recommends that all HIV-infected individuals take Antiretroviral (ARV) medication to prevent the spread of HIV to others, to reduce the chance of getting sick from HIV and to increase life expectancy with HIV infection.

We will not give you antiretroviral (ARV) medications as part of this research study. You must have a primary health care provider for HIV, a HIV doctor, to take part in this study. If you don't have one and need help finding one or getting ARV medications, please tell a study doctor or nurse, who will help you find a qualified HIV doctor and ARV medications. You and your primary health care provider will make all decisions about starting, stopping or changing ARV medications. We will give you HIV viral load and CD4 count test results when there is a significant change and advise you to discuss them with your health care provider. We expect you to tell us about changes in your ARV medications. Changes in ARV treatment will not affect your continued participation in the study.

MONITORING OF THE STUDY

A group of physicians and scientists at NIH will monitor this study. This group will review the information from the study and will pay close attention to possible harmful reactions. If serious side effects occur, VRC01LS infusions may be delayed

STUDY NUMBER: 16-I-0147

CONTINUATION: Page 4 of 9

or canceled.

GENETIC TESTING

In the future, genetic research tests may be done on your stored samples to help understand how VRC01LS and methods of preventing HIV work. In research studies, some genetic tests are done to see if different types of immune response seem to be related to genetic differences in people. Genetic tests done in a research lab from your stored samples will not be recorded in your medical record and will not have your name on the sample. The performance of these tests is not for health care purposes.

STORED SAMPLES

We will collect blood samples from you during the study. We will keep these samples for future research to learn more about monoclonal antibodies, vaccines, the immune system, and/or other medical conditions. Results from research done with your stored samples will not be in your medical record or reported to you.

Labeling of Stored Samples: We will label your stored samples by a code (like a number). Only the study team can link this code to you. Any identifying information about you will be kept confidential as much as the law allows. Despite protections, there is a small chance that information identifying you will be given to someone who should not get it.

Risks from Stored Samples: There is a risk of unplanned release of information from your medical records. The chance that this information will be given to an unauthorized person without your permission is very small. Possible problems with the unplanned release of information include discrimination when applying for insurance and employment. Similar problems may occur if you give information about yourself or agree to have your medical records released.

Future studies: In the future, other investigators (at NIH or outside of NIH) may wish to study your stored samples. When your stored samples are shared, they will be marked with a code. Your samples will not have any identifying information on them. Some information about you, such as your gender, age, health history, or ethnicity may also be shared with other researchers.

Any future research studies using your samples will be conducted in a way that protects the rights and privacy of study participants.

Your stored samples will be used only for research and will not be sold. The research done with your materials may be used to develop new products in the future but you will not receive payment for such products.

Making your Choice: You can only take part in this study if you agree to let us collect, store, and use your blood samples in future unspecified research. If you decide not to take part in this study, you may still take part in other studies at NIH.

POSSIBLE STUDY RISKS

Risks from IV infusions:

It is possible that you may have some side effects. General risks of methods that use a needle include stinging, discomfort, pain, soreness, redness, bruising, swelling or a tiny cut at the needle insertion site.

<u>Risks of VRC01LS</u>: As of February 2017, 36 adults who did not have HIV infection received 65 product administrations of VRC01LS and most had mild or no reaction. More than 840 other adults have received a very similar product called VRC01 and most of these people also had mild or no reaction. Some of the reactions included temporary kidney laboratory abnormalities (elevated creatinine and proteinuria), temporary liver laboratory abnormalities (elevated transaminase and aminotransferase), and temporary white blood cell laboratory abnormalities (neutropenia). This study is the first time that VRC01LS is being given to people with HIV infection. VRC01LS may have additional unknown risks and side effects. We do not know if getting VRC01LS will affect how you respond to any similar investigational monoclonal antibody against HIV. Currently there is no approved and licensed monoclonal antibody to treat HIV.

Side effects to study product infusions may include fever, chills, shaking, nausea, vomiting, pain, headache, dizziness, trouble breathing, high or low blood pressure, itchiness, rash, hives, lip or face swelling, diarrhea, racing heart or chest pain. These reactions may be related to how fast the antibody product is given. However, we rarely saw these reactions when VRC01 was given. When reactions were reported, they were usually mild.

STUDY NUMBER: 16-I-0147

CONTINUATION: Page 5 of 9

We are giving VRC01LS at a controlled rate. If symptoms occur while VRC01LS is being given, tell the nurse. Slowing or stopping the flow rate may help improve the symptoms.

Some antibody products have a risk of serious allergic reactions that can be life-threatening.

- Anaphylaxis is one type of allergic reaction that may happen soon after an antibody product is given. This reaction can include difficulty breathing, low blood pressure, hives or rash, swelling in the mouth and face.
- Serum sickness is a delayed type of allergic reaction that may happen several days to three weeks after an antibody product is given. This reaction can include hives or rash, fever, enlarged lymph nodes, muscle pains, joint pains, chest discomfort and shortness of breath.

Some antibodies of the type that attack human proteins can increase the risk of serious infections. VRC01LS is not expected to increase the risk of serious infections because it attacks a virus and not a human protein.

In addition to the possible risks that are listed above, VRC01LS may have other side effects that we do not know about yet. Taking part in this study may affect your eligibility for future studies with similar products.

We will give you any new information about risks or other information that becomes available that may affect your decision to continue in the study.

<u>Risks of Blood Drawing</u>: Blood drawing may cause pain and bruising and rarely, may cause a feeling of lightheadedness or fainting. Rarely, it may cause infection at the site where the blood is taken. In this study on the day you get VRC01LS, one IV line will be placed in a vein on each arm and left for a few hours. Problems at the IV site are usually mild and may include pain, bruising, minor swelling or bleeding. Rarely, there may be an infection, vein irritation, or a blood clot.

<u>Risks during Pregnancy</u>: We do not know what effects VRC01LS may have on a fetus or nursing infant. Women who are able to have children must agree to not get pregnant during study participation. We will discuss effective birth control methods with you.

You must tell the clinic staff right away if you become pregnant during this study or think that you might be pregnant. If you become pregnant after getting VRC01LS, we will not collect any more blood for research. However, you will be asked to continue with study follow-up visits to check on your health and to report the outcome of the pregnancy to us, which will be reported to the antiretroviral pregnancy registry (http://www.apregistry.com).

POSSIBLE BENEFITS

This study will not provide you with any direct health benefit. You and others may benefit in the future from the information that we learn from the study.

COSTS TO YOU FOR YOUR PARTICIPATION

There are no costs to you for taking part in this study. You or your health insurance will have to pay for all medical costs for medical care that you get outside this study. It is possible that you may have some expenses that are not covered by the study compensation provided.

COMPENSATION TO YOU FOR YOUR PARTICIPATION

You will be compensated \$1300 for your study participation as follows: \$150 for the infusion visit and \$50 for the other 22 study required visits. This will be based on the number of study visits you attend and study injections you receive.

There is no other form of compensation available such as reimbursements for parking, tokens or child care. In order to be compensated for your participation in this study, you must provide your Social Security Number. Additionally, please note that the University of Pennsylvania is required to report to the IRS any cumulative payments for participation in research studies that exceed a total of \$600 in a calendar year.

REASONS FOR REMOVING YOU FROM THE STUDY WITHOUT YOUR CONSENT

You may be removed from the study for several different reasons, including:

• You don't keep appointments or follow study procedures.

STUDY NUMBER: 16-I-0147

CONTINUATION: Page 6 of 9

- You get a serious illness that needs ongoing medical care.
- You enroll in another research study at the same time you are in this study.
- You become pregnant.
- The study is stopped or canceled.

A study may be stopped or canceled by a study sponsor, a regulatory agency or by the study investigators. If this happens you will be told the reason why.

You may choose to stop participating in the study at any time. If you got VRC01LS, you will be asked to keep follow-up visits so we can monitor your health. Collection of samples that are for research purposes only may be stopped.

ALTERNATIVES

This study is not designed to treat or prevent any disease. You may choose to not participate in this study. You may be eligible for other studies.

CONFLICT OF INTEREST

The research staff are reviewed at least yearly for conflicts of interest. You may ask the research team for additional information.

The National Institutes of Health, including some members of the Vaccine Research Center scientific staff, developed the experimental product in this research study. The results of this study could play a role in whether the FDA will approve the experimental product for sale at some time in the future. If approved, the future sale of the vaccine could lead to payments to NIH and some NIH scientists. By U.S. law, government scientists are required to receive such payments for their inventions.

You will not get any money from the development or sale of the product.

This protocol may have investigators who are not NIH employees. Non-NIH investigators are expected to follow the principles of the Protocol Review Guide but are not required to report their personal financial holdings to the NIH.

CLINICALTRIALS.GOV

A description of this clinical trial will be available on http://www.ClinicalTrials.gov. This web site will not include information that can identify you. At most, the website will include a summary of the results. You can search this website at any time.

STUDY NUMBER: 16-I-0147

CONTINUATION: Page 7 of 9

OTHER PERTINENT INFORMATION

1. Confidentiality. When results of an NIH research study are reported in medical journals or at scientific meetings, the people who take part are not named and identified. In most cases, the NIH will not release any information about your research involvement without your written permission. However, if you sign a release of information form, for example, for an insurance company, the NIH will give the insurance company information from your medical record. This information might affect (either favorably or unfavorably) the willingness of the insurance company to sell you insurance.

The Federal Privacy Act protects the confidentiality of your NIH medical records. However, you should know that the Act allows release of some information from your medical record without your permission, for example, if it is required by the Food and Drug Administration (FDA), members of Congress, law enforcement officials, National Institute of Allergy and Infectious Diseases institutional review board, study monitors, or other authorized people.

HIPAA AUTHORIZATION

The authorization part of the consent gives more detailed information about how your personal health information may be used and disclosed by the University of Pennsylvania Health System (UPHS), the School of Medicine and the individual Principal Investigator, subject to University of Pennsylvania procedures.

What information about me may be collected, used or shared with others?

 Name, address, telephone number, email address, dates directly related to you such as date of birth and clinic visits.

Personal and family medical history

- Information from questionnaires administered in the study
- Results of tests and procedures you will undergo during this research
- Social Security Number, Medical record number
- Current and past medications or therapies

Why is my information being used?

Your information is important for the research team to contact you during the study. Your information and results of tests and procedures are used to:

• do the research

•

- oversee the research
- to see if the research was done right
- to evaluate and manage research functions

Who may use and share information about me?

The following individuals may use or share your information for this research study:

- The Principal Investigator and the Investigator's study team
- Other authorized personnel at Penn, including offices that support research operations.

Who, outside the School of Medicine, might receive my information?

As part of the study, the Principal Investigator, the study team and others listed above, may disclose your information, including the results of the research study tests and procedures. This information may be disclosed to those listed below:

Individuals or organizations responsible for administering the study:

- Vaccine Research Center (VRC)/National Institute of Allergy and Infectious Diseases (NIAID)/NIH: Data for this study will be recorded on case report forms, keyed into a central database and electronically submitted to the Data Coordinating Center. The data will be cleaned and stored at this facility until it is ready to be analyzed.
- <u>Contract Research Organization (PPD)</u>: Monitors from PPD will review data for accuracy and completeness before the data are sent to VRC for analysis.
- <u>Regulatory and safety oversight organizations</u>: Data from this study will be made available to the Office of Human Research Protections, the VRC/NIAID/NIH.

STUDY NUMBER: 16-I-0147

CONTINUATION: Page 8 of 9

Once your personal health information is disclosed to others outside of the School of Medicine, it may no longer be covered by federal privacy protection regulations. Data are reported to the sponsor on Case Report Forms that identify you by your unique study number and not your name, date of birth or medical record number. Information regarding your health, such as side effects of the study drug you experience will be reported only by code number. All samples collected for analysis will be labeled with your study number, visit number and date of your visit.

The Principal Investigator or study staff will inform you if there are any additions to the list above during your active participation in the trial. Any additions will be subject to University of Pennsylvania procedures developed to protect your privacy.

How long may the School of Medicine use or disclose my personal health information?

Your authorization for use of your personal health information for this specific study does not expire.

Your information may be held in a research database. However, the School of Medicine may not re-use or re-disclose information collected in this study for a purpose other than this study unless:

- You have given written authorization
- The University of Pennsylvania's Institutional Review Board grants permission
- As permitted by law

Can I change my mind about giving permission for use of my information?

Yes. You may withdraw or take away your permission to use and disclose your health information at any time. You must do so in writing to the Principal Investigator at Infectious Disease Division, 502 Johnson Pavilion Philadelphia PA 19104. Even if you withdraw your permission, your personal health information that was collected before we received your written request may still be used and disclosed, as necessary for the study. If you withdraw your permission, you will not be able to stay in this study.

Will I be able to access my records?

The Principal Investigator is not required to release research information to you that is not part of your medical record.

What if I decide not to give permission to use and give out my health information?

If you decide not to give permission to use and give out your health information, then you will not be able to be in this research study.

You will be given a copy of this Research Subject HIPAA Authorization describing your confidentiality and privacy rights for this study. You will also be given the UPHS and School of Medicine's Notice of Privacy Practices that contains more information about the privacy of your personal health information.

What is an Electronic Medical Record?

An Electronic Medical Record (EMR) is an electronic version of the record of your care within a health system. An EMR is simply a computerized version of a paper medical record.

If you are receiving care or have received care within the University of Pennsylvania Health System (UPHS) (outpatient or inpatient) and are participating in a University of Pennsylvania research study, results of research-related procedures (i.e. laboratory tests, imaging studies and clinical procedures) may be placed in your existing EMR maintained by UPHS.

Once placed in your EMR, these results are accessible to appropriate UPHS workforce members that are not part of the research team. Information within your EMR may also be shared with others who are determined by UPHS to be appropriate to have access to your EMR (e.g. health insurance company, disability provider, etc).

2. Policy Regarding Research-Related Injuries. We will offer you the care needed to treat injuries directly resulting from taking part in this research. We may bill your insurance company or other third parties, if appropriate, for the costs of the care you get for the injury, but you may be responsible for some of them. There are no plans for the University of Pennsylvania to pay you or give you other compensation for the injury. You do not give up your legal rights by signing this

STUDY NUMBER: 16-I-0147

CONTINUATION: Page 9 of 9

form. The University of Pennsylvania will provide short-term medical care for any injury resulting from your participation in research here. In general, no long-term medical care or financial compensation for research-related injuries will be provided by the National Institutes of Health, the Clinical Center, or the Federal Government. However, you have the right to pursue legal remedy if you believe that your injury justifies such action.

3. Payments. The amount of payment to research volunteers is guided by the NIH policies.

4. Problems or Questions. If you have any problems or questions about this study or about any research-related injury, contact the Principal Investigator Pablo Tebas, MD, or the Study Team listed on page 1 of this consent form.

If you have any questions about your rights as a research subject, you may call the Clinical Center Patient Representative at 301-496-2626.

5. Consent Document. Please keep a copy of this document in case you want to read it again.

When you sign this form, you are agreeing to take part in this research study. This means that you have read the consent form, your questions have been answered, and you have decided to volunteer. Your signature also means that you are permitting the University of Pennsylvania Health System and the School of Medicine to use your personal health information collected about you for research purposes within our institution. You are also allowing the University of Pennsylvania Health System and the School of Medicine to use show the university of Pennsylvania Health System and the School of Medicine to disclose that personal health information to outside organizations or people involved with the operations of this study.

COMPLETE APPROPRIATE ITEM(S) BELOW:

A. Adult Study Participant's Consent I have read the explanation about this study and have been given the opportunity to discuss it and to ask questions. I hereby consent to take part in this study. Time Signature of Adult Participant Date Print Name THIS CONSENT DOCUMENT HAS BEEN APPROVED FOR USE FROM JUNE 05, 2017 THROUGH JUNE 04, 2018. Signature of Investigator/ Signature of Witness Date Date Person Obtaining Consent Print Name Print Name