

UNIVERSITY OF PENNSYLVANIA INFORMED CONSENT FORM + HIPAA FORM

Protocol Title: 1) Culture Systems for the in vitro Expansion of Peripheral Blood Mononuclear Cells

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215.746.5133

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Protocol Title: 2) Expansion of HIV Infected T Cells in Immunotherapy

Principal Investigator: James L. Riley, Ph.D.
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215.573.6792

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24 HOUR EMERGENCY NUMBER: 215-662-6059 OR 215-838-8449
Please ask for Resident on-call

Why am I being asked to volunteer?

You have been provided this informed consent because you have indicated an interest in participating in a research study of how the cells of your body's natural defense system work against infection. The purpose of this research is to develop new ways to separate and grow white blood cells, and to learn how white blood cells could be used in the future as therapy for a wide variety of disorders such as cancer, infectious diseases and autoimmune diseases.

What is the purpose of this research study?

In addition, your cells will be used in laboratory research of how cells of the immune system work and how they are affected by HIV-1. The purpose of this research is twofold: first, to understand how a molecule (CCR5) that facilitates HIV-1 entry into cells is regulated and second, to obtain purified immune cells that University of Pennsylvania Center of AIDS Research Immunology Core will disperse to the members of the Penn Community doing HIV-1 research.

Your white blood cells will be HLA (HLA, or Human Leukocyte Antigen, is a unique genetic marker or “fingerprint” on white blood cells, composed of pieces that play a critical role in turning on the body’s defense system) typed as part of our study. The HLA typing test will be performed solely for research on your white blood cells. No experimental treatments or procedures will be performed on you. These research results will not be of direct benefit to you, however, the results may provide important benefit to others. With this in mind, you are being asked to serve as a volunteer and to donate white blood cells for a research study. Your blood will be used for research purposes at the University of Pennsylvania, and may also be used for research purposes by collaborators at academic and for-profit institutions.

What am I being asked to do?

Participation in this study may require two visits to the Hospital of the University of Pennsylvania. On your first visit (which should take no more than 30 minutes), you will be evaluated to determine if you are able to participate in this study. This will involve a brief medical history to establish that you have no ongoing medical problems that would interfere with your participating in this study.

As part of your evaluation you will be examined by the nursing staff of the Apheresis Unit/Blood Bank Collection Facility to establish that you have large, easy to get to arm veins that can be used to collect blood. The facility, located on the 3rd Floor of the Ravdin Pavilion, is where apheresis/blood collection (described below) takes place at the Hospital Of The University Of Pennsylvania. Potential volunteers with small veins or those easily injured cannot participate in this study. Only potential volunteers in whom a needle may be easily placed in the vein without the risk of significant injury to the vessels and nearby tissues can participate in this study.

Volunteers who are going to have an apheresis procedure will be asked to withhold certain anti-hypertensive medications that are categorized as ACE (angiotensin converting enzyme) inhibitors per apheresis policy. You must be 18 years old or older to participate. You must be willing and able to give written informed consent (the purpose of this document). You will be asked whether you are infected with the HIV virus or whether you have hepatitis. You will also be asked whether you have risk factors for developing either of these infections.

Potential volunteers with known HIV virus or hepatitis virus exposure, or who have risk factors for either HIV infection or hepatitis (e.g., any prior blood transfusion, multiple sexual partners, drug abuse, etc.) will be excluded from participation, except on occasions when the Principal Investigators wish to recruit HIV or hepatitis positive individuals.

Your blood will be tested for prior exposure to infectious agents that could cause hepatitis or Acquired Immune Deficiency Syndrome (AIDS), if you are not already HIV or hepatitis positive. A complete blood count will also be performed. The results of these tests will be reported to Dr. Siegel, Dr. June and Dr. Riley. You will also be notified of the results of these tests in writing and referred to your personal physician for follow up care if appropriate. These tests are being performed solely for the protection of health care workers at the Hospital of the

University of Pennsylvania and the research scientists at the University of Pennsylvania who will be coming in contact with your blood. There is no cost to you for these tests. If you test positive for HIV, by law we have to report the infection 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.

If you are a woman of child bearing age you will be excluded from participation in this study if you are known to be pregnant or if there is a reasonable possibility (based on your history) that you might be pregnant. Pregnant women are excluded because they have a high risk of iron deficiency due to the increased use of dietary iron by the fetus. Iron is part of the prenatal vitamin supplements recommended for all women during pregnancy. Although red blood cell loss is small during apheresis it is not zero and therefore will add to the material iron needs. In addition there are significant blood volume changes during pregnancy.

If you are able to participate in this study you will be asked to return to the Apheresis Unit/Blood Bank Collection Facility on the 3rd Floor of the Ravdin Pavilion. The second visit will take about three hours.

The nursing staff will ask you a few questions and briefly examine you to see that you are still in good health and have no signs or symptoms of illness. You will be asked to answer the questions that appear on the blood donor information form. If you are well and willing to participate, you will then undergo leukapheresis (blood is removed by vein and the blood components are separated by a machine so that the lymphocytes or white blood cells can be separated from the rest of your blood, which includes the red cells and platelets) to obtain blood cells. During this time two needles will be placed in veins near each elbow. The needles are connected by plastic tubing to a machine that will process a portion of your blood. Your blood will flow from one arm vein to the machine and back to the other arm. Some of your blood (3-4 tablespoons) may be diverted during the leukapheresis procedure and collected for research testing purposes. The apheresis machine, which performs the apheresis procedure described above, will remove some of your white blood cells and will return your blood (minus some white blood cells) to your body. The blood is prevented from clotting within the tubing of the machine by adding a chemical. Some additional fluid ("saline") will also be added to your blood, the amount of this fluid will be determined by your blood pressure and the total time it takes to perform the apheresis, which varies from person to person. The additional fluid (saline) is rapidly removed by your kidneys and will have no effect on you. A compound in your blood called citrate may cause you to briefly have symptoms that include tingling in your lips and fingers. If this occurs you will be given some calcium (e.g., Tums) to reverse this effect. Collection of the white blood cells will be done using customary medical procedures. Your pulse, blood pressure and temperature will be checked before and after the procedure. You will be asked to report any new signs of symptoms (e.g., light headedness, tingling in lips or extremities, shortness of breath, etc.) as is customary

procedure. At the end of the apheresis you will be monitored for 15 minutes and then discharged from the study.

At the discretion of the Principal Investigator, approximately ¼ to 1 cup of blood may be collected by placing a needle in your arm to take blood (this is called venipuncture) instead of undergoing the leukapheresis procedure described above. This procedure will require no more than 15 minutes and you will be compensated \$20. You will not be able to donate blood via venipuncture if you have donated approximately 1 cup of blood within the past 60 days.

What are the possible risks or discomforts?

Apheresis uses standard well-established medical procedures that can be done with minimal risk or discomfort to you. However, there are some problems that may develop that you should be aware of prior to participation in this study.

The risks to you are those associated with the established practice of leukapheresis. You may develop pain at the site where the needle is inserted into your skin. You may experience a small amount of bleeding at the needle site, or inflammation (irritation) of the vein (also known as phlebitis). There is a risk of local infection of the skin. You may develop chills, nausea, vomiting, decreased blood pressure, dizziness or tingling. If needed additional intravenous fluid will be given to you, or the rate of blood flow will be slowed. These measures are known to lessen or completely eliminate these symptoms. Other significant risks of leukapheresis include loss of blood, a systemic infection and fluid overload.

As with any type of procedure, there may be other unexpected risks or complications, including serious or life threatening complications, and there can be no guarantee as to the outcome of this procedure. The Apheresis Staff will examine all potentially eligible volunteers to ensure that only those in whom the procedure can be done with the minimal risk are selected.

Risks associated with inserting a needle in your vein to collect blood include: bruising, swelling, black and blue marks, fainting and or infection at the site.

What are the possible benefits of the study?

Although the results of any tests performed for this study may not benefit you directly, they can be made available to your physician upon request.

Will I be paid for being in this study?

Volunteers who undergo apheresis will be paid one hundred and fifty dollars (\$150) for participating in this study. If you withdraw from the study before the apheresis is complete because the procedure makes you uncomfortable, or because you are no longer willing to participate for any reason, you will still be paid \$150 for participation. Volunteers who do not undergo apheresis will not be paid.

Volunteers who have ¼ to 1 cup of blood collected by venipuncture will be paid twenty dollars (\$20.00) for participation in this study.

If new products are developed from this research, you will not receive any additional financial or other compensation.

Confidentiality

Every attempt will be made by the investigators to maintain all information collected in this study strictly confidential, except as may be required by court order or by law. Authorized representatives of the University of Pennsylvania Institutional Review Board (IRB), a committee charged with protecting the rights and welfare of research subjects, may be provided access to medical or research records that identify you by name. If any publication or presentations results from this research, you will not be identified by name.

What happens if I am injured or hurt during the study?

In the event of any physical injury resulting from the research procedures, medical treatment will be provided without cost to you, but financial compensation is not otherwise available from the University of Pennsylvania.

You or your third party payer, if any, may be billed for medical expenses associated with this study only if they are deemed medically necessary and such expenses would have been incurred independent of the study, or if your third party payer agrees in advance to pay for such expenses.

When is the Study over? Can I leave the Study before it ends?

Your decision to take part in this study is a voluntary one and your medical care will not be affected if you refuse. You may terminate your participation anytime without prejudice to present or future care at the University of Pennsylvania. You may refuse to participate in or withdraw from the study at any time without penalty or loss of benefits to which you may otherwise be entitled. You may withdraw from the study if you find that you are too uncomfortable during the apheresis procedure.

Who can see or use my information? How will my personal information be protected?

The investigator and staff involved with the study will keep your personal health information collected for the study strictly confidential. Please refer to the separate "HIPAA Privacy Authorization" document that explains more specifically how your personal information will be protected.

Electronic Medical Records and Research Results **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.

If you have never received care within UPHS and are participating in a University of Pennsylvania research study that uses UPHS services, an EMR will be created for you for the purpose of maintaining any results of procedures performed as part of this research study. The creation of this EMR is required for your participation in this study. In order to create your EMR, the study team will need to obtain basic information about you that would be similar to the information you would provide the first time you visit a hospital or medical facility (i.e. your name, the name of your primary doctor, the type of insurance you have). Results of research procedures performed as part of your participation in the study (i.e. laboratory tests, imaging studies and clinical procedures) may be placed in this EMR.

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).

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

The following personal health information will be collected, used for research, and may be disclosed during your involvement with this research study:

<ul style="list-style-type: none">• Name, address, telephone number, date of birth, email address• Information from a physical examination that generally also includes blood pressure reading, heart rate, breathing rate and temperature• Results of tests and procedures you will undergo during this research study as described in this informed consent form	<ul style="list-style-type: none">• Results from viral screening including HIV and Hepatitis testing• Personal and family medical history• Current and past medications or therapies• Prior or current medical information from any hospitalization, physician, radiology, laboratory results and any other facility you have been to that would aid in obtaining an accurate medical history, medical status while participating in this study.
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Why is my information being used?

Your information is used by 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.

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
- Authorized members of the workforce of the UPHS and the School of Medicine, and University of Pennsylvania support offices, who may need to access your information in the performance of their duties (for example: for research oversight and monitoring, to provide treatment, to manage accounting or billing matters, etc.).

Who, outside of UPHS and the School of Medicine, might receive your personal health information?

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

- The Principal Investigator and the Investigator's study team at the Greenebaum Cancer Center at the University of Maryland.
- In order to obtain lenalidomide from Celgene during the maintenance portion of this study (day +100 after your transplant), your name, address, phone, date of birth and the fact that you are participating in this trial will be disclosed to Celgene and its agents or vendors that supply lenalidomide and administer the RevAssist® program. By signing this consent form you agree to this disclosure.

Oversight organizations:

- The Office of Human Research Protections

Once your personal health information is disclosed to others outside of UPHS or the School of Medicine, it may no longer be covered by federal privacy protection regulations.

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.

Once your personal health information is disclosed to others outside the School of Medicine, it may no longer be covered by federal privacy protection regulations.

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 do this by sending written notice to the investigator for the study. If you withdraw your permission, you will not be able to stay in this study.

What if I decide not to give permission to use and give out my 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.

By signing this document you are permitting the School of Medicine to use and disclose personal health information collected about you for research purposes as described above.

Subject Rights

Should you wish further information regarding your rights as a research subject at the University of Pennsylvania, you may contact the Director of Regulatory Affairs by telephone at 215-898-2614. If significant new knowledge is obtained during this research study that may relate to your willingness to continue participation, you will be informed of this knowledge. If you have any questions about your participation in this study either before, during or after participation you may contact Dr. June 215-746-5133. You may contact Dr. Riley at 215-573-6792. Alternatively, you may contact Dr Siegel at 215-898-9655 or Dr. O'Doherty at 215-573-7273.

Conclusion

You have been given the opportunity to ask questions and have had them answered to your satisfaction. Your signature below means that you are freely giving your permission to participate in this research study and that you have received a copy of this informed consent document. As a participant in this study you have agreed to donate white blood cells obtained by leukapheresis. Your blood cells will be used by the University of Pennsylvania, as well as collaborators at academic and for-profit institutions for research purposes. You also give consent for your blood to be tested for exposure to HIV and hepatitis and have signed a separate consent for HIV testing, if applicable.

Your name:		
Your Signature:		Date:

Print name of person obtaining consent:		
Signature of person obtaining consent:		Date:

ADDENDUM TO INFORMED CONSENT FORM

Please read each sentence below and think about your choice. After reading each sentence, circle “Yes” or “No”. No matter what you decide to do, it will not affect your care. You may withdraw your permission for the use of your blood for research, **but you must do so in writing** to the Principal Investigators Drs. June and Riley in the Abramson Cancer Research Institute BRB II/III 5th floor, 421 Curie Boulevard, Philadelphia, PA 19104-6160.

If you withdraw your permission to use any blood obtained for the study, the Principal Investigator will ensure that these specimens are destroyed or will ensure that all information that could identify you is removed from these specimens.

If you have any questions, please talk to your doctor or nurse, or call the University of Pennsylvania Institutional Review Board (IRB) at (215) 898-2614.

1	My blood may be kept for research about various health problems (for example: causes of diabetes, Alzheimer’s disease, cancer, HIV, and heart disease).
	<input type="checkbox"/> Yes <input type="checkbox"/> No

Please sign your name here after you circle your answers.

Your name:		
Your Signature:		Date:

Print name of person obtaining consent:		
Signature of person obtaining consent:		Date: