IMPORTANCE OF IMMUNE CELLS IN RESEARCH

Your immune cell donation may assist researchers to advance medical treatments, lead to a scientific breakthrough or even develop cures for certain diseases or disorders. Immunologists worldwide have a need for high quality immune cells and cellular subsets, and this is where you come in! Researchers will use donations like yours in an attempt to find novel ways to prime the immune system against cancers and other diseases such as HIV, auto-immune disorders, multiple sclerosis, Crohn’s, allergies and asthma. Immunotherapy treatments are especially effective against lung cancer, skin cancer and blood cancers such as leukemia and lymphoma.

WHITE BLOOD CELL DONATION PROCESS

Blood is made up of many components, specifically platelets, red blood cells, plasma and white blood cells, which can all be individually collected.

The process of leukapheresis allows for peripheral blood mononuclear cells (PBMCs) to be collected from the blood while returning red blood cells, platelets and plasma back to the donor. An apheresis machine is used to draw blood through a vein in one arm, remove the needed component and return the unneeded parts back to the donor through the other arm. Leukapheresis collection, using the Spectra Optia® Apheresis System, is a safe process and most donors experience minimal to no side effects.

CONTACT US

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Biological Specialty Company

FDA-registered donor center operating under Investigational Review Board (IRB) approval

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LEUKAPHHERESIS: AN OVERVIEW

Derived from the latin roots of leuk (meaning white) and aphaeresis (translates to take away). A medical term to describe the collection process of white blood cells, often referred to as “immune cells.”
ELIGIBILITY REQUIREMENTS

People with all blood types are welcome to donate but must:

• Be able to provide consent
• Be feeling well and pass our medical exam
• Be at least 18 years of age
• Weigh at least 110 lbs
• Possess the proper documents listed in the “Things to remember” below

THINGS TO REMEMBER

Identification is required so remember to bring:

• A current (non-expired) photo ID
• Proof of Social Security Number
• Proof of Current Address

BE SCREENED

Your participation will include both a screening and donation visit. These visits may occur on the same day. If screening and donation cannot happen on the same day, you will be asked to make an appointment on another day that is convenient for you.

• After providing consent, an overall health assessment with our trained staff will be performed. This includes an arm/skin check, vital signs, weight measure and finger-stick sampling for Hematocrit, blood draw for Human Leukocyte Antigen testing, viral marker testing and complete blood count.
• Personal information will be collected by questionnaires.
• Baseline vital signs (temperature, pulse, blood pressure) will be measured prior to the start of the procedure.

TIME COMMITMENT, COMPENSATION AND THE TIME BETWEEN DONATIONS

Upon completion of your donation, you will be compensated for your time and efforts. Please note that compensation varies based on the time and effort you have spent donating. Also, you can expect an extra bonus at future donations if you are a requested donor.

The apheresis donation may take about one to four hours so it’s best to plan your schedule accordingly. While your white blood cell count is lowered initially for a short period of time, your body will restore these cells naturally. This allows for leukapheresis to be completed every few weeks according to the chart below.

<table>
<thead>
<tr>
<th>Donation Volume</th>
<th>Approx. Time Commitment</th>
<th>Wait Time between donations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Half-pak</td>
<td>1.5-2.5 hours</td>
<td>2 weeks</td>
</tr>
<tr>
<td>Full-pak</td>
<td>3-4 hours</td>
<td>4 weeks</td>
</tr>
</tbody>
</table>

PREPARING TO DONATE

• Drink plenty of hydrating fluids, avoiding caffeinated liquids and alcohol prior to your visit.
• Be sure to eat healthy. Approximately two hours before your donation, eat a well-balanced meal that is high in protein. Try to avoid food high in fats, oils or grease.
• Get a good night’s rest.

DONATE YOUR IMMUNE CELLS

START
• You will be made comfortable in an adjustable donor chair.
• The skin at the IV target sites will be cleansed.
• A needle will be inserted into a vein in your arm (venous access). A second needle will be introduced into a vein in your opposite arm (venous return).

DURING
• A nurse or phlebotomist will monitor the donor and apheresis cell separator continuously during the procedure.
• Immune cells will be collected using a FDA-approved apheresis cell separator system, using continuous-flow centrifugation (spinning) for separation of blood into different components. The apheresis cell separator system will be anticoagulated with a citrate-based anticoagulant (anti-clotting), ACD-A.
• A small amount of your plasma may be collected at the same time as the white blood cells.
• You will be monitored for signs of negative reactions by our trained staff.

AFTER
• Upon completion of the collection, needles will be removed, you will be assessed to confirm stability, and be given instructions for post-donation care.
• Although rare, the risks associated with leukapheresis are associated with the reduction in leukocytes or white blood cells, interaction with the anticoagulation solutions, and the actual venipuncture site for withdrawal and return of blood.

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THINGS TO REMEMBER

1. Blood is drawn.
2. Blood is separated into components by a centrifuge.
3. Needed components are collected into sterile bags.
4. Unused components are returned to the donor.