

Stem Cell Harvest

What can I expect the day of my stem cell collection?

- After you pick up your admission package at Patient Registration, please come to the apheresis room to be admitted. You should expect a long day lasting 6 to 8 hours, so feel free to bring along a friend or a family member to keep you company.
- Blood will be taken from your apheresis catheter or intravenous line.
- Lab reports are reviewed and some of the results will be entered into the collection machine. We look at a couple of different results to give us direction for your treatment.
 - Your white blood cell count (WBC) is important for determining if we can continue with the collection. We will also give you your dose of neupogen if your WBC is not too high.
 - If your white blood count is too low, this procedure may need to be cancelled and rescheduled.
- Once we know the procedure will take place, the collection machine (OPTIA) is loaded. This takes about 20 to 30 minutes to complete. At this point we will give you the opportunity to use the bathroom before we connect you to the machine.
- The procedure begins, but do not worry, your nurse will explain the process to you. Please do not hesitate to ask questions, that is what we are here for!

Rules of the day!

- Sorry! Bathroom privileges are non-existent once your procedure has started! You will need to use a bedside commode or urinal, so please wear clothes that are easy to remove, like track pants.
- Eating and drinking is allowed, please bring enough food for a 6 to 8 hour stay.
- You may want to bring headphones for music. There are also TV's in the apheresis room.
- Please take your prescribed medications including pain medications the day of your procedure. If you will need other medication during the day, please bring that with you also. It is very difficult for us to provide medications for you.
- Please remember to bring your neupogen in a cooler pack with you from home. If you are donating for someone else, we will have your last dose of neupogen at the hospital for you.

What about the actual collection?

- Your doctor will determine how many cells we need to collect from you. If not enough are collected on Day 1, you will be asked to return a second day to collect more. Your apheresis doctor will call you that night to let you know what the count is and whether you need to return to us in the morning for a second collection.
- If a Day 2 is needed, you will come back to the apheresis room the next day, at the same time. This collection day will be much like the first.

Some words you may hear us use...

- **Buffy Coat** - The layer of blood that is made up mostly of white blood cells and platelets.
- **Interface** - This is the boundary that separates blood components during the procedure.
- **Blood Components** - Parts of the blood such as red blood cells, white blood cells, platelets and plasma.
- **Centrifuge** - A part of the machine that spins quickly to separate your blood components.
- **ACD-A or anticoagulant** - An anticoagulant used during your procedure that stops the blood from clotting in the machine.
- **Citrate toxicity** - Occurs when there is too little calcium in the blood. You may feel numbness or tingling around your mouth, in your fingertips or toes.
- **Calcium Gluconate** - A mixture from pharmacy that is infused through the return line to stop citrate toxicity.
- **Plasma Collection** - During your procedure, we are asked to collect plasma which will be used to mix with your stem cells when they are frozen. It is collected in a separate bag and sent to the stem cell lab when the procedure is finished.

What happens when we are done?

- When the procedure is finished, we will take more blood from your line to review your counts. You will remain with us until they are received, and then be discharged if they are stable.
- There are times when extra medication is needed to help you make more stem cells. If you need this medication it will be given after the procedure and you will return for day 2 the following day.
- You may feel weak and tired following the procedure, please have someone available to pick you up.

While we do encourage you to bring a family member or a friend with you to your collection, we find that patients do better in a quiet, calm atmosphere. You may not be the only patient in the apheresis unit during your collection.