What is Apheresis?

**Apheresis (a-fer-ee-sis)** can be used to treat many types of diseases and health conditions. Apheresis means to take away. This procedure is done to remove or take away certain cells from the blood. Apheresis may also be used to collect and save certain cells which can then be used later.

There are several types of apheresis procedures. Each type removes a different part of the blood. These may include:

- Leukapheresis - removes white blood cells
- Lymphapheresis - removes lymphocytes (a type of white blood cell)
- Peripheral stem cell apheresis - removes stem cells
- Plasmapheresis - removes plasma (the liquid part of blood)
- Plateletpheresis - removes platelets (blood cell that helps blood to clot)

How do I prepare for this procedure?

- Each person responds differently to apheresis. **If this is your first time to have this procedure**, you should plan to have someone drive you home.
- Eat a meal just before coming to the hospital.
- You should use the bathroom before the procedure begins.

Where is the procedure done?

The Apheresis Unit is located in room A176 on the 1st floor of The James Cancer Hospital (460 W. 10th Avenue).

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This handout is for informational purposes only. Talk with your doctor or health care team if you have any questions about your care.

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How is the procedure done?

During this procedure, blood is removed and sent through tubing connected to an apheresis machine. The machine spins the blood and separates the part of the blood to be removed. Only a small portion of your blood is taken through the machine at any one time. The remaining blood is then returned to your body.

For the procedure, you will need two intravenous (IV) needles placed. One IV is used to remove the blood and the other IV is used to return the blood. This can be done by putting an IV needle in each arm or by using a special central venous catheter (CVC) that has two lumens or ports.

A specialty trained nurse will check on you before, during and after the procedure. Apheresis can take 2 to 6 hours to complete. When the procedure is done, you will be removed from the machine. If you had IV’s placed in your arms, they will be removed and covered with a dressing.

A blood thinner (anticoagulant) is slowly added to the blood during the procedure. This is given to prevent clotting. Side effects from the blood thinner may include slight tingling around your mouth, chest vibrations, and a cold or chilled feeling. Calcium is given by pill or IV to prevent these symptoms.
Depending on the reason for the apheresis procedure, it may be done more than one time. Your health care team will tell you if you need to return for another procedure.

What are the possible side effects of this procedure?
Each person may respond differently to this procedure. Possible side effects may include:

- Dizziness or feeling light-headed
- Nausea

Tell the nurse right away if you have any of these side effects.

What can I expect after the procedure?

- Most people feel tired after the procedure. You should limit activities for 12 hours after the procedure.
- Your arms may feel sore from being in one position during the procedure.
- You should drink plenty of non-caffeinated fluids.
- Keep the bandages dry and in place for 5 hours after the procedure.
- Do not do any heavy lifting or exercise during this time.
- If you get dizzy, lie down and elevate your legs.

When should I call the Apheresis Department?

- If you develop any redness or pain where the needle was or if you have any questions or concerns, you should call The Apheresis Department:
  - Daytime, Monday through Friday, call 614-293-8672.
  - After hours or weekends, call the hospital operator at 614-293-8000 and ask the operator to page the Pathology resident on call.