

## HATS Apheresis Program

If you have any other questions about the apheresis procedure, side effects, or expected outcomes, please call 410-955-1717

If you have any questions concerning scheduling your appointments or billing issues, please call your Case Manager

*This information was created by nurses Catherine, LaKeisha and Maria of the HATS Dept.*



### Hemapheresis and Transfusion Support

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## STEM CELL COLLECTION

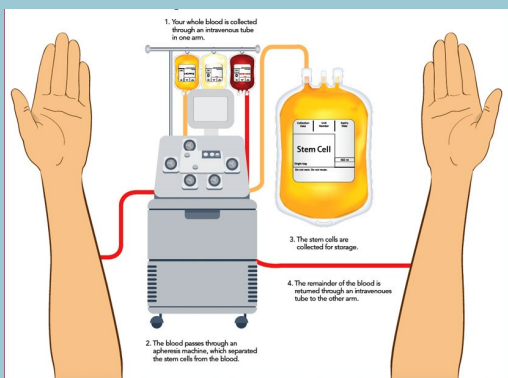
### PATIENT EDUCATION



HATS Apheresis Program at  
The Johns Hopkins Hospital



## APHERESIS PROCESS



### A Patient's Guide to Stem Cell Collection

#### What is Apheresis?

Hemapheresis, also called Apheresis, is a procedure used in the treatment of a variety of illnesses by which blood is removed from the body and separated into 4 components: plasma, platelets, white blood cells and red blood cells. The targeted blood component is then removed and the remaining blood cells, with or without a replacement fluid, are returned to the patient.

#### What is a Stem Cell?

Hematopoietic stem cells, also known as HPC, are found in the blood and bone marrow. They are used in the treatment of many diseases to replace or rebuild damaged and dead cells in the body.

### Types of HATS Apheresis Collections

**Autologous HPC:** - Mobilization of stem cells from your own bone marrow using growth factor (GSF). The stem cells are collected via apheresis and infused back into you at a later time.

**Allogeneic HPC:** - Mobilization of stem cells from the donor's bone marrow using growth factor (GSF). The stem cells are collected via apheresis and infused into a designated recipient.

**MNC Apheresis:** - A collection of lymphocytes from a donor via apheresis to be infused into a designated recipient.

**CAR T-cell:** - A collection of lymphocytes from your own peripheral blood via apheresis. The cells are then sent to a manufacturer for processing which are then infused back into you.

#### What happens During a Stem Cell Collection?

**Step 1:** For the procedure, your venous access will be assessed by an Apheresis RN. Patients with adequate veins will have needles placed in each arm. Patients with unsuitable veins will have a central venous catheter placed before the collection.

**Step 2:** Once access is established, the Apheresis RN will connect you to the apheresis machine. The apheresis machine draws your blood into a cell separator centrifuge that will separate the white blood cells from the whole blood. The separated white blood cells are then removed and collected into a collection bag.

**Step 3:** The remaining blood components in the machine are mixed and returned to you.

**Step 4:** The collection can last between 2-6 hours depending on the type of collection. During the procedure, you can take a nap, read, eat, listen to music, watch TV or use your mobile device/ tablet.

### Potential Risks and Side Effects?

Stem Cell Collection is a safe procedure, but some side effects may occur. You may have discomfort at the needle site, fatigue, dizziness, lightheadedness, nausea, low blood pressure, hives, chills, numbness/tingling sensation, or a decrease in blood counts. It is important to notify the nurse immediately if you start to experience any of these symptoms.

### How Can You Prepare for Your Collection?

1. Bring a complete list of your medications including the drug names, dosages, and the times you take them. You will also need your photo ID.
2. It is helpful to drink plenty of fluid and eat a meal prior to your collection. Those hydrated and nourished tolerate the procedure better. Feel free to bring snacks and/or lunch depending on the length of your collection.
3. You may feel tired or fatigued after the procedure. If you are an outpatient, it is recommended you have someone drive you home.
4. On the day of your procedure, wear loose fitting and comfortable clothing.

### After Your Stem Cell Collection?

1. Continue to hydrate for at least 24 hours.
2. Eat a hearty lunch and dinner.
3. Minimize physical activity for several hours after the procedure.
4. Monitor your access sites for signs of bleeding. Refer to your After Visit Summary (discharge instructions).

