Preparing for Stem Cell Donation
Utah Blood and Marrow Transplant Program

Thank you for being willing to donate stem cells for a cancer patient’s transplant. The Utah Blood and Marrow Transplant (BMT) team is grateful for your commitment to cancer treatment.

Donor Workup
The BMT team has already found that your stem cells match those of a cancer patient. Now the team must check you for other things important to the transplant’s success. This is called the donor workup. The appointment takes 1–2 hours. It includes the following:

- You must complete a medical history questionnaire.
- The transplant team checks your veins to make sure they are strong enough for stem cell collection.
- The transplant team does some blood tests.

Before your donor workup appointment. Please follow these instructions to prepare:

- Complete the Donor Medical History Questionnaire. E-mail it back to the transplant coordinator or fax it to 801-587-5838. If that is not possible, bring it with you to the appointment.
- During the 24 hours before your appointment, drink 4 liters of water.
- Eat meals as usual before the appointment.

The day of the workup appointment or soon after, the transplant doctor meets with you. At this appointment, the doctor will do the following:

- Review your medical history questionnaire
- Do a physical exam

If your medical history and test results show you qualify, the doctor will explain the collection procedure in detail and ask you to sign a consent form.

Methods of Stem Cell Donation
The BMT Program uses two different methods to collect stem cells from donors: peripheral blood stem cells (PBSC) collection or bone marrow collection.

PBSC Collection
The BMT team uses a process called apheresis for PBSC collection. In apheresis, your blood goes through a needle in one arm (IV) to a machine that collects only the stem cells. The rest of your blood returns to you through a needle in your other arm. For the five days before the donation, you will get daily shots of a drug called filgrastim. This drug increases the number of stem cells in your blood.

Filgrastim may cause some side effects:

- Bone pain (especially in hips, lower back, and ribs)
- Fatigue
- Headaches
- Insomnia
- Nausea
- Pain, swelling, or redness at the injection site
- Vomiting

If you have any of these effects, call the transplant clinic at 801-585-2626.

The BMT Program’s apheresis team does the procedure in our clinic. No anesthesia or hospital stay is needed. The collection session starts at 7 a.m. and lasts about 4–6 hours. It sometimes takes two collection days to get enough stem cells for the transplant. You will know by late afternoon whether a second day is needed.

continued on page 2
Before PBSC donation. Please follow these instructions:

• Drink plenty of water for several days before the collection.
• During the 24 hours before the collection, drink 4 liters of water.
• Eat a good breakfast on the day of the collection.
  – Some donors may need a temporary catheter in a larger vein for the collection instead of in the arm. If you need this, the BMT team will tell you not to eat or drink anything for several hours before the procedure.

Your body replaces stem cells within 24 hours of the collection. You can return to normal activities the next day.

Bone Marrow Donation
Bone marrow donation is an outpatient surgery. It takes place in a hospital operating room, but you do not stay overnight. You do not have to take filgrastim shots before the collection.

Doctors use needles to collect marrow from your hip bone. You will get anesthesia medicines so you feel no pain during the collection.

Before bone marrow donation. Please follow these instructions to prepare for bone marrow donation:

• The day before the collection, you will have another appointment with the transplant doctor for a medical history update and pre-surgery physical exam. The team will draw some of your blood for testing. You will sign a consent form for the surgical procedure.

• Do not eat or drink anything for 8 hours before the surgical procedure.

The procedure takes 1–2 hours. You may need a blood transfusion after the stem cell collection.

Usually, donors leave the hospital the same day as the collection. It is important that you stay in Salt Lake City through the next day.

You will have a bruised and achy feeling in the lower back and hips after the collection. The transplant team will give you medicine to ease the pain. Usually, you can return to normal activities in 3–4 days.

If you have any questions or concerns about preparing for stem cell collection, please contact your transplant coordinator.

Carol Nielson  801-587-4489
Francesca Paglione  801-587-4653
Zachary Miller  801-213-5608
Laura Spruit  801-587-4086