

# NIH Clinical Center Patient Education Materials

## What to expect on the day of your stem cell transplant

### **What is a stem cell transplant?**

A blood or marrow transplant gives you stem cells that were either:

- Donated earlier by you (autologous), or
- Donated by a matched donor (allogeneic). Stem cells can rebuild your bone marrow after chemotherapy and radiation therapy. They do this by finding their way into the bone marrow. Once inside the bone marrow, stem cells grow into red blood cells, platelets, and white blood cells. If you have received a blood or platelet transfusion, receiving a transplant will be similar.

### **What happens before my transplant?**

The day of your stem cell transplant will start out like most other days in the hospital. You will receive your medications as usual and be able to eat your meals. Your nurse will give you Tylenol and Benadryl about 30 to 60 minutes before the infusion starts. These medications help prevent an allergic reaction to your stem cell infusion, particularly if you receive frozen cells, which use the preservative DMSO.

### **What happens once it begins?**

Your transplant will be done in your room. During the transplant, you will also receive saline through your vascular access device. Your nurse will assess you often and monitor you for any reactions.

### **Will stem cells be given by injection or through my vascular access device?**

Stem cells are packaged in small bags or large syringes. Like blood products or medications, the contents of the bags or the syringes will be infused into your vascular access device.

### **How long will the transplant take?**

Each bag or syringe can take 5 to 15 minutes to infuse. The entire process and monitoring after the infusion will take several hours.

### **What can I do during my transplant?**

You may rest in bed or sit up in a chair. You may eat, move around, and visit with family members and friends. Some patients even like to have pictures taken during their transplant. Whatever you wish to do, you must stay in your room during the entire transplant. This way, you can be monitored for side effects during the infusion.

### **Will I have side effects?**

Most people tolerate the infusion well, but side effects are possible. If they occur, these side effects are usually due to the preservative, DMSO. Side effects include:

- Allergic reactions
- Nausea
- Flushing
- Rash
- Chest tightness
- Shortness of breath
- Chills

Please tell your nurse right away if you have these or other side effects.

If any of these side effects occur, the infusion may be slowed or stopped. Your doctor or nurse will take quick action, and the stem cell infusion should be able to continue.

### **What about odor?**

The preservative DMSO is used for cells that have been stored; it gives off an odor that some people compare to creamed corn. You and others may notice this odor during your stem cell infusion, and it may last for a day or so. Freshly cut oranges or other fruits may help mask the smell. While you might not notice the smell, you may have an odd taste in your mouth. Sucking on hard candies may help minimize or remove an odd taste from DMSO.

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