

*“As a patient, it is critical to keep  
building on your knowledge.”*

— BMT Survivor

## **CHAPTER 18**



**Glossary of Terms**

**Notes**

**Activities to Keep Your Mind Sharp**

# Chapter 18

## Glossary of Terms

**Acute**

A sudden onset of symptoms of disease

**Afebrile**

No fever; having a normal temperature

**Albumin**

A protein substance found in the blood

**Allergy**

An inappropriate and sometimes harmful response of the immune system to normally harmless substances

**Allogeneic Bone Marrow or Stem Cells**

Bone marrow or stem cells obtained from one person to be transplanted into a different person

**Alopecia**

Loss of hair

**Ambulatory**

The ability to walk; not confined to bed

**Analgesic**

A drug used to relieve pain

**Anemia**

Too few red blood cells in the bloodstream, resulting in insufficient oxygen to tissues and organs

**Anorexia**

The loss of appetite

**Antibiotic**

A drug used to fight bacterial infections

**Antibody**

A protein in the blood that helps defend the body against foreign substances including bacteria and viruses

**Antiemetic**

A drug used to control nausea and vomiting

**Antifungal**

A drug used to fight infections from fungi

**Antigen**

A foreign substance that can stimulate the body's immune system, resulting in the production of antibodies or other defensive actions by white blood cells

**Antihistamine**

A drug used to relieve the symptoms of allergies like hives, runny nose and itching

**Antineoplastics**

Drugs used to treat cancer

**Apheresis**

The process of drawing blood from the bloodstream, separating its various components, saving one component, usually stem cells or platelets and returning the remainder to the body

**Ascites**

An excessive accumulation of fluid in the peritoneal (abdominal) cavity

**Aspiration**

The removal of fluids from the body by suction

**Autologous Bone Marrow or Stem Cells**

Bone marrow or stem cells donated by you for your own use in a transplant

**Axilla**

The armpit

**Bacteria**

Living organisms that can be seen only under a microscope and can cause infection

**Benign**

A growth or tumor that is not malignant or cancerous

**Bilateral**

Two sides of the body

**Biopsy**

The removal of tissue for examination under a microscope, commonly required to enable the doctor to make a diagnosis

**Blasts**

Immature white blood cells

**Blood Cells**

Cells that make up the blood, including red blood cells, white blood cells and platelets

**Blood Count**

A lab test to determine the number of cells in blood

**Blood Transfusion**

Blood administered through a vein to replace blood cells in the blood stream when there is a deficiency of a particular component (e.g., platelets, red blood cells)

**Blood Typing and Cross-Match**

Lab tests done before transfusion to match the patient's blood with a donor's

**Bone Marrow**

A spongy substance which fills the hollow spaces in bones. This is where hematopoietic stem cells are found and blood cells are produced

**Bone Marrow Aspiration**

A procedure in which a needle is inserted into a bone to take out a sample of bone marrow to be studied

**Bone Marrow Harvest**

The collection or "harvesting" of hematopoietic stem cells from bone marrow

**Bronchoscopy**

A procedure used to diagnose pulmonary conditions where the throat and bronchi are directly inspected through a flexible lighted tube

**Catheter**

A small, flexible plastic tube inserted into a portion of the body to administer and remove fluid

**Chemotherapy**

A drug or combination of drugs designed to kill cancerous cells

**Colony Stimulating Factors**

Proteins that stimulate the development of certain types of blood cells in the bone marrow

**Comfort and Pain Management Therapies**

Medications or other measures used to control pain, relieve pain or increase comfort. These may include the use of music, heat, ice, humor or massage.

**Computerized Tomography (CT or CAT scan)**

A type of X-ray study that uses computers to obtain a clear picture of the body. Sometimes a dye is used to obtain better pictures.

**Conditioning Regimen**

The combination of chemotherapy drugs and/or radiation used to prepare your body for a blood or marrow transplant

**Culture**

A test in which samples of body fluids such as blood, sputum or urine are examined to look for the cause of an infection

**Cytomegalovirus (CMV)**

A virus within the herpes family of viruses. CMV can occasionally cause pneumonia.

**Day Zero**

Day zero is the day a patient's stem cells will be reinfused into his or her body

**Differential (Diff)**

Percent of different types of white blood cells in the blood

**Diuretic**

A drug which increases the elimination of water and salts (urine) from the body

**Donor**

The person whose bone marrow or stem cells are harvested for transplant into a patient

**Edema**

The abnormal accumulation of fluid causing swelling

**Electrocardiogram (EKG)**

A test used to measure the heart's electrical impulses to evaluate its rhythm and function

**Eligibility Criteria**

Guidelines established for a research protocol or study that state whether or not a patient will be able to participate safely in that study. These guidelines may take into account type of disease, prior treatments, age and other illnesses.

**Engraftment**

When the transplanted marrow or stem cells begins to work to manufacture new cells in the patient's bone marrow (white blood cells, red blood cells and platelets)

**Febrile**

To have a fever

**Graft-versus-Host Disease (GVHD)**

A common complication of blood and marrow transplantation between allogeneic stem cell transplant recipients and their donors. It occurs when the new marrow (the graft) recognizes the recipient (the host) as foreign and sends out lymphocytes to attack it. It can involve the skin, liver, gastrointestinal tract and other organs.

**Granulocyte Colony Stimulating Factor (GCSF)**

A medication that makes the bone marrow produce more stem cells. Note: This medication is also known as Neupogen.

**Granulocytes**

A category of white blood cells that contain granules within their cell body

**Growth Factor**

An agent that stimulates growth of cells

**Hematuria**

Blood in the urine

**Hemoglobin**

That part of the red blood cell that carries oxygen to the tissues

**Hemorrhagic Cystitis**

A condition in which there is bleeding and occasional ulcerations in the bladder

**Herpes Simplex**

A common virus that can cause sores on the lips or in the mouth and in the genital area

**Herpes Zoster**

A viral infection characterized by the development of painful skin eruptions that follow the route of underlying nerves (e.g., shingles, chicken pox)

**High-dose Chemotherapy**

The treatment of disease through very high doses of anticancer drugs

**Histocompatibility**

Blood tests used to determine the similarity between donors and recipients

**Hope and Parsons Village**

Temporary patient housing on the City of Hope campus. Some patients may use Hope and Parsons Village when hospitalization is not necessary but must remain in close proximity to the hospital.

**Human Leukocyte Antigens (HLA)**

Structures that appear on white blood cells, as well as cells of almost all other tissues. HLA antigens are tested in both the donor and the recipient to ensure that they match, which will increase the chance of survival of the transfused or transplanted cells. HLA typing and matching can be done for platelet transfusions and blood and marrow transplantation.

**Hydration Therapy**

Intravenous fluids given to ensure the kidneys are functioning properly or to replace fluid lost as a result of vomiting or diarrhea

**Hyperalimentation**

Intravenous administration of nutrients. It is also called total parenteral nutrition, or TPN.

**Hyperglycemia**

High levels of sugar in the blood

**Hypertension**

High blood pressure

**Hypotension**

Low blood pressure

**Immune**

A state of adequate protection against certain infections or foreign substances

**Immune System**

A group of organs, cells and other substances in the body that fights disease

**Immunosuppressed**

When the body's immune system is weakened and less able to fight infection and disease. Immunosuppression can result from chemotherapy, radiation or be a result of the disease process.

**Infection**

The invasion and multiplication of disease-producing organisms within the body

**Inflammation**

The body's reaction against injury or infection. Signs and symptoms may include pain, swelling, heat and tenderness at the site.

**Intake and Output (I and O)**

A measure of the amount of fluids taken in by your body (e.g., by drinking, IV, etc.) and the amount of all body fluids being put out (e.g., urine, stool, emesis, etc.)

**Intralipid**

A fat solution often given along with total parenteral nutrition (TPN) to provide the body with nutrients

**Intrathecal**

Within the spinal column. Occasionally medicine/chemotherapy is given directly into the intrathecal space (spinal column)

**Intravenous (IV) Infusion**

The delivery of fluids or medicine directly into the bloodstream through a vein

**Isolation**

Keeping a person separated from others to prevent the spread of infection or to protect them from outside sources of infection.

**Jaundice**

A yellowing of the skin, the whites of the eyes and the mucosa due to an increase in bilirubin.

**Low Bacteria Diet**

This diet includes healthy foods that are low in bacteria. All foods in a low bacteria diet must be prepared and cooked in such a way to minimize bacteria.



**Lumbar Puncture**

Insertion of a needle into the intrathecal space in order to remove cerebrospinal fluid for testing, or to administer medication into the intrathecal space, or both. This fluid is tested for the possible presence of cancer cells, bacteria and other substances.

**Lymphocytes**

The white blood cells which form antibodies necessary for immunity to specific diseases

**Matched Unrelated Donor (MUD)**

A type of allogeneic transplant using a donor from the general population who is not related to the patient but who is a very close HLA match

**Mixed Lymphocyte Culture (MLC)**

Lymphocytes from the donor and recipient are mixed together and tested for their compatibility

**Neupogen (see GCSF)**

Trademark name of GCSF.

**Occupational Therapy**

Provides services to people whose ability to function in daily life has been disrupted by physical illness, injury, mental illness, developmental delay or the aging process. Each individual is assisted in achieving an independent, productive and satisfying lifestyle via goal-directed, purposeful activity.

**Oral**

In the mouth

**Peripheral Blood Stem Cell Collection**

The collection of hematopoietic stem cells from the patient's peripheral blood using a technique called apheresis

**Petechiae**

Tiny pinpoint red spots on the skin or in the mouth, which usually indicate a low level of platelets

**Physical Therapy or PT**

Provides intervention to restore or maximize the physical abilities of patients of all ages. The focus is to provide patients with the means to maximize functional independence.

**Platelet**

One of the main components of blood that helps to produce clots to stop bleeding. Also called thrombocytes.

**Pneumonia**

Infection of the lung

**PRBC**

Packed red blood cells — Red blood cells that have been separated from a unit of whole blood for transfusion

**Protocol**

Clinical trial treatment plan

**Purging**

Removal of cancer cells from the marrow and/or stem cell

**Recreation Therapy**

Provides assistance to individuals in the restoration, adaptation and adjustment required to achieve optimal health and well-being. The focus is to enable individuals to develop, maintain and express a satisfying leisure lifestyle.

**Red Blood Cells**

Cells that contain hemoglobin and carry oxygen to all parts of the body. Also called erythrocytes.

**Reduced Intensity Transplant**

Also called nonmyeloablative transplant or mini-transplant. This is an allogeneic transplant that uses less intensive treatment to prepare for transplant. The preparation regimen does not destroy all of the bone marrow as a standard transplant regimen does. The reduced intensity transplant relies on the donor's cells to fight the cancer.

**Refractory**

Not responding to treatment

**Serum Glutamic-Oxaloacetic Transaminase (SGOT)**

A liver enzyme that indicates how the liver is functioning

**Side Effects**

Reactions to drugs that are usually temporary and reversible. Side effects do not relate to drug effectiveness.

**Sinusoidal Obstructive Syndrome (SOS)**

See VOD

**Sputum**

A mixture of saline, mucus and cells coughed up from the lungs and throat

**Stem Cells**

The precursor cells to all cell lines in the body. Hematopoietic stem cells are the precursor cells to the development of the cells of the blood (white blood cells, red blood cells and platelets).

**Syngeneic**

From an identical twin

**T Cells**

Small white blood cells processed in the thymus that are important in the body's immune system. Also known as T-lymphocytes.

**Total Parenteral Nutrition (TPN)**

Intravenous administration of a high-calorie, high-protein solution (also see hyperalimentation)

**Vascular Access Device (VAD)**

A long, narrow tube that is surgically placed into a large vein leading directly to your heart

**Veno-Occlusive Disease (VOD)**

Also called sinusoidal obstructive syndrome (SOS), it is a disease of the liver caused by toxic effects of high-dose chemotherapy and/or radiation, characterized by a blockage in the venous outflow of the liver

**White Blood Cells (WBC)**

A variety of blood cells that help fight germs, as well as fungal and bacterial agents. Also called leukocytes.



## My Bone Marrow Transplant Team

*case manager*

*nurse coordinator*

*child life specialist*

*nurse practitioner*

*clinical psychologist*

*patient advocate*

*social worker*

*dietitian*

*physician assistant*

*doctor*

*psychiatrist*

*nurse*

*rehabilitation team*

S O C I A L W O R K E R R O T C O D B X  
H U U O G P S Z X K T P U H T F O R S D  
V Q A K V Z C H K G I P S O K T K M A J  
K T O Y N N I K W O B T J U D V P B V R  
F B B L P J M Q I V G Y P N P W B P T U  
N R O T A N I D R O O C E S R U N A Q X  
D U P U X U W E G U Z V N N I G N S X S  
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D I U S A F R E G A N A M E S A C A H E  
V D I E T I T I A N I X W C Y T Z A B K  
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Q W S B V H C L G H K K L Y Q T H H L O  
G S P N B G S I N W Q K G S I Z N T Q W  
P J L W P A T I E N T A D V O C A T E L  
T S I G O L O H C Y S P L A C I N I L C  
B T N A T S I S S A N A I C I S Y H P I  
T S I L A I C E P S E F I L D L I H C C  
K C T S I R T A I H C Y S P Y O X Y O O  
S M Y X W E L I L H D T T M J A R D M A  
W F R E H A B I L I T A T I O N T E A M

## Good Things to Know about a Bone Marrow Transplant

Complete the crossword below

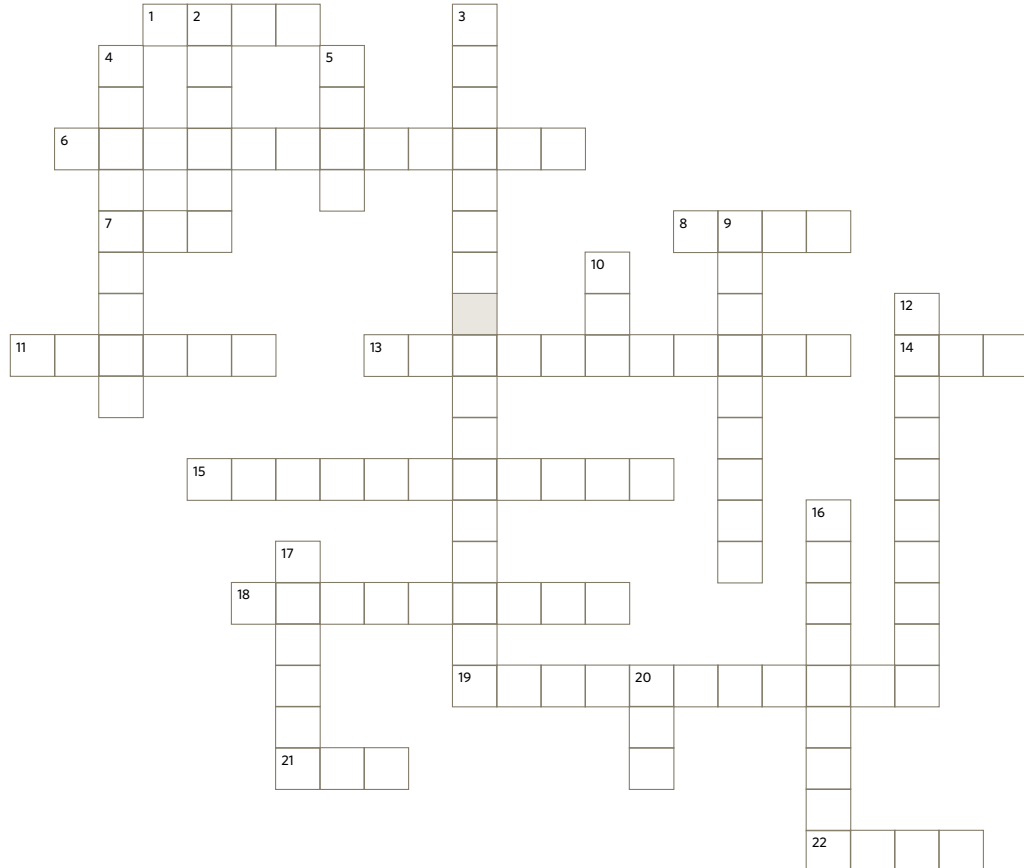
### Across

1. Is an example of fast growing cells in your body
6. High doses of this are given to destroy the cancer cells
7. Contains hemoglobin and picks up oxygen from the lungs and carries it to the cells
8. Something a person must wear to protect you from an infection
11. All pre-admission testing must be done within \_\_\_\_ days of your scheduled transplant
13. You are not allowed to keep any of these in your room
14. Short for the unrelated donor transplant using a donor from the general population who is not related to the patient
15. Perfect tissue match. Usually from one identical twin to the other
18. Someone who helps care for you during and after your transplant
19. Point when your "new" stem cells or marrow begin to make WBCs, RBCs and platelets
21. Blood cells that are part of the body's immune system
22. There is no profit in curing the body if, in the process, we destroy the \_\_\_\_

### Down

2. If you feel weak, dizzy or short of breath you might be \_\_\_\_\_
3. A verbal or written instruction that tells people your wishes should you not be able to speak for yourself
4. Process used to collect the healthy stem cells from your blood
5. Graft-versus-host disease
9. In this type of transplant, the donor is usually a brother or sister
10. Typing used to match donor to a recipient
12. After you are discharged from the hospital, you will be seen as an \_\_\_\_\_ in the clinic
16. Help prevent bleeding
17. The place in the body where blood cells are created is called the bone \_\_\_\_
20. One of many factors that are considered when selecting patients for a bone marrow transplant

*allogenic*  
*GVHD*  
*anemic*  
*advance directive*  
*synergeneic*  
*hair*  
*mask*  
*apheresis*  
*HLA*  
*age*  
*soul*  
*outpatient*  
*caregiver*  
*RBC*  
*thirty*  
*platelets*  
*URD*  
*medications*  
*WBC*  
*marrow*  
*engraftment*  
*chemotherapy*



## Cancer is Puzzling

By Valerie Esguerra, Patient/Family Advisor — 2009 Bone Marrow Transplant Survivor

### Across

2. Angel in disguise
4. Extent of cancer
9. Where most patients go to get their blood drawn
10. Patients take these to get better
13. May cause hair loss
14. Helford patients see this on their walls
15. Worn on your face for safety
16. What some patients experience after treatment
17. What City of Hope provides its patients

### Down

1. Describes doctors and nurses at City of Hope
3. A form of therapy
5. Requires a donor
6. Has impact on our health
7. Ovarian cancer patient
8. The bad 'C' word
11. Patients come back to City of Hope for this
12. "Want a piece of me?"
13. Another "hat" doctors and nurses wear

