

# GLOSSARY OF TERMS

## A

---

<b>ABO testing</b>	Blood tests that classify human blood into one of four groups: A, B, O or AB.
<b>anemia</b>	A decreased amount of circulating red blood cells in the body. Anemia may result from blood loss, destruction of red blood cells, or a decrease in the production of red blood cells. The hemoglobin level is decreased in patients with anemia.
<b>antibody</b>	An antibody is a protein produced by the immune system in response to specific antigens. Antibodies help the body fight organisms that cause infection and any foreign substances.
<b>antigen</b>	An antigen is a substance usually found on the surface of cells that identifies the cell as “self” or “non-self.” The antigen causes an immune response through antibody production against the antigen.
<b>arteriogram</b>	An arteriogram is a radiologic study (x-ray) or picture of the arteries in an organ system that is visualized through a special dye that is infused in the blood stream.

## B

---

<b>B cells</b>	B cells are a type of lymphocyte, or white blood cell, that develop in the spleen and are responsible for the body’s immunity. B cells produce antibodies which help fight infection and foreign substances.
<b>biopsy</b>	A biopsy is a procedure that removes a small amount of tissue from an organ, tumor, bone, or other tissue from the body to find out more information about that organ or tissue. A heart biopsy is performed to examine heart tissue. A tiny cylinder of tissue, showing heart cells and how they are arranged, is removed. This tissue is examined under the microscope by a pathologist to look for any evidence of rejection or infection in the transplanted heart.
<b>Blood Urea Nitrogen (BUN)</b>	A test that indicates kidney function. The BUN is a product of protein breakdown, or waste product, normally excreted by the kidney.

**C**

---

<b>calcium</b>	A mineral measured in the blood that is required for bone growth and for blood clotting. It is also needed for the heart and nerves to function.
<b>catheter</b>	A flexible tube that enters or exits the body. Catheters may be used to drain body fluids (a urinary catheter drains urine) or to administer fluids or medications through a vein (a central venous catheter).
<b>cholesterol</b>	A form of fat that performs necessary functions in the body but can also cause heart disease; cholesterol is found in animal foods such as meat, fish, poultry, eggs and dairy products.
<b>chronic</b>	Having a disease for a long period of time. Chronic disease may worsen slowly over time. It may be treatable but is usually not reversible.
<b>coagulation</b>	The process of blood clotting. A variety of factors are necessary for the blood to have a normal clotting ability. Clotting ability is assessed by several blood tests including the prothrombin time (PT), partial thromboplastin time (PTT), and platelet count.
<b>coagulopathy</b>	Decreased ability of the blood to clot which increases the risk of bleeding, particularly with surgery or any invasive procedures such as biopsies.
<b>complete blood count (CBC)/ full blood count (FBC)</b>	A blood test that measures many parts of your blood count including the hemoglobin (Hgb), hematocrit (Hct), platelets (Plt), and the types of white blood cells (WBC).
<b>CT scan</b>	Computed Tomography scan; a noninvasive radiologic study that shows a detailed cross-section of organ and tissue structure.
<b>congestive heart failure</b>	a disease of the heart muscle causing enlargement and weakening of the heart.
<b>creatinine</b>	The creatinine level is an indication of kidney function. It is a waste product produced by the muscles and released into the blood stream. Creatinine levels may be increased with kidney disease. Abnormal creatinine levels can also be caused by some medications.

- crossmatch** This is a test that examines the compatibility of the transplant recipient's blood with that of the donor. A high positive crossmatch may indicate the need for higher levels of immunosuppression. A negative crossmatch means that there is no reaction between the donor and recipient.
- cytomegalovirus** CMV; a virus commonly seen following transplantation that can cause an infection in the gastrointestinal tract, blood, liver, lungs, and/or eyes. CMV is a type of herpes virus.

## D

---

- diabetes** A disease originating in the pancreas related to insulin production that causes high levels of glucose (sugar) in the blood.
- diastolic** This is the "bottom number" of blood pressure measurement when the heart muscle is at rest, expanding and filling with blood.
- diuretic** A medicine that helps remove excess fluid from the body tissue by causing the body to excrete sodium. Furosemide (Lasix<sup>®</sup>) and spironolactone (Aldactone<sup>®</sup>) are diuretics. These medications will increase urine output.

## E

---

- Echocardiogram (ECHO)** An ultrasound of the heart that uses sound waves to check the size, shape and motion of the heart. It also checks the heart valves and the heart pumping function. An ECHO can detect fluid in the sac around your heart (pericardial effusion). The radiology technician or radiologist applies a gel to the chest. A wand with a rotating ball is placed on the chest and gently moved around the area to take pictures of the heart.
- edema** Swelling of tissue, particularly in the face, hands, legs, and ankles. Diuretics may help to decrease edema.
- electrolytes** The dissolved form of a mineral found in the blood that helps maintain bodily functions and fluid balance. Sodium, potassium, chloride, magnesium, calcium, and phosphorus are some of the electrolytes found in your body.

<b>Electrocardiogram EKG/ECG</b>	A noninvasive test that records the electrical activity of the heart.
<b>enzyme</b>	A protein made in the body that is capable of changing a substance from one form to another.

## G

---

<b>gingival hypertrophy</b>	Swelling or enlargement of the gums. Gingival hypertrophy is a side effect of cyclosporine and some seizure medications. Gum overgrowth may be controlled or decreased through good oral hygiene, surgical gum reduction, and changes in immunosuppression.
<b>glucose</b>	A type of sugar in the blood that supplies energy to the cell. Glucose levels may vary with diet, medications, stress, and organ dysfunction.

## H

---

<b>hematocrit</b>	A measurement of the amount of red blood cells in the blood.
<b>hematoma</b>	A bruise with swelling caused by the accumulation of blood in tissue.
<b>hemoglobin</b>	A substance in red blood cells that gives blood its characteristic red color. Hemoglobin contains iron and protein. It carries oxygen from the lungs to the tissues and carbon dioxide from the tissues to the lungs.
<b>herpes</b>	A family of viruses that cause infection in humans.
<b>hirsutism</b>	Excessive hair growth. Hirsutism is a common side effect of cyclosporine and is seen in both male and female transplant recipients who receive cyclosporine. In women, increased hair growth is often seen as male-patterned growth.
<b>hyperlipidemia</b>	A high level of fats (triglycerides or cholesterol) in the blood. This can be caused by diet, genetic disorders, or medications.
<b>hypertension</b>	High blood pressure.

**I**

---

<b>immune system</b>	A specialized system of cells and proteins that protect the body from organisms that may cause infection or disease.
<b>immunity</b>	The ability of the body to resist a specific disease.
<b>immunization</b>	Providing the body with protection from certain diseases through vaccinations.
<b>immunosuppressed</b>	Describes the immune system of a transplant recipient which is weakened or inhibited by certain medications. Specific medications (such as cyclosporine, tacrolimus, and prednisone) are used to lower the ability of the immune system to attack foreign cells (the transplanted tissue). Immunosuppression will help decrease the body's ability to reject the transplanted organ.
<b>infection</b>	Organisms such as bacteria, fungi, and viruses that invade the body and reproduce, causing a variety of symptoms.
<b>insulin</b>	A hormone secreted in the pancreas by the Islets of Langerhans that regulates sugar metabolism. Insulin helps the body use sugar and other carbohydrates. As insulin is released in the body, the blood glucose level decreases.
<b>intravenous (IV)</b>	Within the blood stream; fluids and medications may be given intravenously as well as by mouth (PO).

**L**

---

<b>lymphocytes</b>	Cells produced by the lymph glands that are responsible for immunity and defend the body against infection and foreign substances by producing antibodies and other substances.
--------------------	---

**M**

---

<b>magnesium</b>	A mineral required for normal bodily function. Magnesium is involved in nerve, skeletal muscle, heart, and cell function. It is also involved in blood clotting and the metabolism of carbohydrates and proteins.
------------------	---

**N**

---

- nephrotoxicity** Kidney damage, usually as a result of medications or other substances.
- nonadherence** Failure to follow instructions for medical care. This may include not taking medications as prescribed, not obtaining labs as instructed, or missing clinic appointments and tests. Nonadherence is a significant post-transplant issue that often results in rejection, infection, an ultimately loss of the graft.

**P**

---

- Pneumocystis jiroveci pneumonia (PJP)*** A bacterial infection of the lungs that is more common in people who are immunosuppressed. Transplant recipients are usually prescribed an antibiotic (Bactrim®/Septra®) to prevent this type of pneumonia.
- platelet** A type of blood cell that is involved in the clotting process. Platelets help stop bleeding at the site of the injury by clumping and forming a clot. If the platelet count is low, there is an increased risk of bleeding.
- PTLD** Post-transplant lymphoproliferative disease; a wide spectrum of viral disorders associated with the Epstein Barr Virus (EBV) that may range from a self-limiting mononucleosis (“mono,” glandular fever) to a type of lymphoma, or cancer of the lymph nodes. PTLD is a complication of a suppressed immune system and occurs in only a small percentage of patients. Treatment includes lowering immunosuppression and administering antiviral medications.
- potassium** A mineral required for normal body functioning. Potassium is important in helping the heart, nerves, and muscles function properly. Potassium also helps change carbohydrates into energy and in forming proteins. The kidneys excrete any extra potassium in the body. It is important to follow potassium levels after transplant because some anti-rejection medications can cause an increase in the potassium level. If the potassium level is too high, there is a risk for abnormal heartbeat patterns (arrhythmias). Some diuretics can cause low potassium levels.

**prophylactic medications** Antibiotics or antivirals that are prescribed to prevent certain infections in a specific group of patients who are at a higher risk for these infections. For example, patients who are at risk for CMV may receive prophylactic (preventative) treatment with ganciclovir or valganciclovir.

## R

---

**rejection** A process in which the body's immune system attacks the transplanted organ, usually resulting in damage to that organ.

**renal** A term that refers to the kidney or having to do with the kidney.

## S

---

**shingles** A viral infection caused by the herpes zoster virus that usually affects an area by a nerve, resulting in fluid-filled blisters and pain. Shingles are most commonly seen on the neck, abdomen, and legs. The virus can also affect the nerves of the eye.

**sodium** A type of salt found in the blood and required by the body to maintain the balance between electrolytes and water.

**steroids** Corticosteroids; hormones secreted by the adrenal gland, located above the kidney. This hormone can also be manufactured. It is prescribed through medications such as prednisone/prednisolone. Steroids can help prevent rejection and may also be prescribed in higher dosages to treat rejection.

**systolic** The "top number" of blood pressure measurement. The systolic pressure measures the pressure as the heart muscle contracts to pump blood around the body.

## T

---

**T cells** T cells are a type of lymphocyte, or white blood cell, that develop in the thymus gland which is located in the upper chest in front of the heart. T cells are associated with acquired immunity, or the ability of the body to fight an infection or foreign substance that it was exposed to in the past. T cells play a major role in the rejection process.

**thrush** A fungal infection that looks like white plaques or spots in the mouth (oral mucosa), throat, and on the tongue. Patients who are immunosuppressed are at greater risk for developing thrush.

## U

---

**ultrasound** A test that displays internal bodily organs, blood vessels, and ducts using sound waves. An ultrasound of the heart, often called an echocardiogram (ECHO), may be obtained to examine the size of the heart and the valves, fluid in the sac around the heart, and the heart pumping function.

## V

---

**vital signs** The measurement of temperature, blood pressure, heart rate, and respiratory (breathing) rate.

## W

---

**wean** To slowly withdraw or reduce; Immunosuppression, particularly steroids, may be weaned slowly over time in patients who have not had rejection.

**white blood cell** A type of blood cell that fights infection.