

## LIVER GLOSSARY

**ABSORPTION** - the degree and pace at which a drug enters the bloodstream from the small intestine

**ACUTE TUBULAR NECROSIS (ATN)** - reversible kidney damage resulting in delayed kidney function.

**ALKALINE PHOSPHATASE** - an enzyme produced by liver cells; elevated blood levels of this substance may indicate abnormal function of the liver or other organs

**ALLOGRAFT** - a graft between two individuals who are of the same species (eg. human) but have genetic differences

**ANTACID** - a drug that aids in protecting the digestive system and relieves heartburn and digestive discomfort

**ANTIBODY** - a protein produced by the body to eliminate foreign substances, such as bacteria

**ANTIGEN** - a substance that triggers an immune response. This response may be the production of antibodies, which try to inactivate or destroy the antigen (transplanted organ)

**ANESTHETIC** - medication that reduces pain by reducing sensation

**ARTERIOGRAM** - an x-ray of the arteries taken with the aid of a dye

**ASCITES** - excess fluid in the abdomen

**ATHEROSCLEROSIS** - a buildup of fats in the lining of the arteries that may interfere with the flow of blood

**B CELL** - a specialized white blood cell responsible for the body's immunity

**BACTERIA** - small germs that can cause disease

**BILIARY STENOSIS** - narrowing or constriction of a bile duct

**BILIARY TREE** - all passageways inside and outside the liver that carry bile to the intestines

**BILE** - a fluid produced by the liver, stored in the gallbladder, and released into the small intestine to help absorb dietary fats

**BILE DUCTS** - the tubes through which bile flows

**BILE LEAK** - a hole in the bile-duct system that causes bile to spill into the abdominal cavity

**BILIRUBIN** - an orange-colored substance in bile produced by the breakdown of red blood cells

**BIO AVAILABILITY** - a measure of how much of an administered drug is absorbed into the bloodstream, actually reaching the intended site of action in the body.

**BIOPSY** - the removal and examination of tissue sampling for diagnosis

**BLADDER** - the part of the urinary tract that receives urine from the kidneys and stores it until urination

**BLOOD UREA NITROGEN (BUN)** - a waste product normally excreted by the kidney. BUN values represent how well the kidneys function

**BRAIN DEATH** - when the brain has permanently stopped working, as determined by a neurological surgeon, artificial support systems may maintain functions such as heartbeat and respiration for a few days

**BUN** – see blood urea nitrogen

**CADAVERIC DONOR** - an individual who has recently died of causes that do not affect the function of an organ to be transplanted.

**CELLCEPT®** - an immunosuppressive drug used with other immunosuppressants to prevent the rejection of the transplanted organ.

**CHOLESTEROL** - 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

**CIRRHOSIS** - a disease causing irreversible scarring of the liver

**CYCLOSPORINE** – drug that helps keep the body from rejecting a transplanted organ. Brand names include Neoral® and Gengraf®

**CMV (CYTOMEGALO VIRUS)** - a virus infection that is very common in transplant recipients; it can affect the lungs and other organs as well; a member of the family of herpes viruses

**COAGULATION** - blood clotting

**CORTICOSTEROIDS** - a category of immunosuppressive medications that includes prednisone and prednisolone

**CREATININE** - a substance found in blood and urine; it results from normal body chemical reactions; high blood creatinine levels are a sign of depressed kidney function

**DETOXIFY** - to change a harmful substance into a safer form

**DIABETES** - a disease in which patients have high levels of sugar in their blood

**DIALYSIS** - the process of cleansing and achieving chemical balance in the blood of patients whose kidneys have failed.

**DIASTOLIC** - the bottom of two blood pressure numbers which measures blood pressure when the heart is at rest

**DIURETIC** – a drug that removes water from the body by promoting urine formation and the loss of salt.

**EDEMA** - excess fluid in body tissues; Example: swelling of the ankles

**ELECTROCARDIOGRAM** - a recording of the electrical activity of the heart

**ELECTROLYTE** - refers to the dissolved form of a mineral such as sodium, potassium, magnesium, chlorine, etc.

**ENCEPHALOPATHY** – changes in mental function that develops when the liver cannot filter poisons from the bloodstream.

**ENZYME** - a protein made in the body and capable of changing a substance from one form to another

**FIBROSIS** – formation of excess fibrous connective tissue in an organ; fibrosis of the liver can lead to cirrhosis.

**GALLBLADDER** - a muscular sac attached to the liver; it stores bile

**GASTROENTEROLOGIST** - a physician who specializes in the care of the digestive tract

**GLUCOSE** - a type of sugar found in the blood

**GRAFT** – a transplanted organ or tissue

**GRAFT SURVIVAL** - when a transplanted tissue or organ is accepted by the body and functions properly.

**HELPER T CELL** - the specialized white blood cell that tells other parts of the immune system to combat infection or foreign material

**HEMATOCRIT** - a measure of the red-blood-cell content of blood

**HEMOCHROMATOSIS** – a condition that develops when too much iron builds up in the body

**HEMODIALYSIS** - a method of dialysis in which blood is purified by circulating through an apparatus outside the body

**HEPATIC** - relating to the liver

**HEPATITIS** – inflammation of the liver

**HEPATOCELLULAR CARCINOMA** – liver cancer

**HEPATOLOGIST** - a physician who studies the liver and treats liver disease

**HEPATOMEGALY** - an enlarged liver

**HEPATORENAL SYNDROME** – Kidney failure that occurs in cases of advanced liver disease secondary to cirrhosis

**HERPES** - a family of viruses that infect humans; herpes simplex causes lip and genital sores; herpes zoster causes shingles

**HISTOCOMPATIBILITY** - the examination of antigens in a patient, often referred to as "tissue typing" or "genetic matching". Tissue typing is routinely performed for all donors and recipients in kidney and pancreas transplantation to help match the donor with the most suitable recipients. This helps to decrease the likelihood of "rejecting" the transplanted organ.

**HIGH BLOOD PRESSURE OR HYPERTENSION** - Occurs when the force of the blood pushing against the walls of the blood vessels is higher than normal because the blood vessels have either become less elastic or have gotten smaller. Hypertension causes the heart to pump harder to move blood through the body. It can cause kidney failure and heart disease if not treated.

**IMMUNE RESPONSE** - any defensive reaction to foreign material by the immune system

**IMMUNE SYSTEM** - the body's natural defense system against foreign substances, such as bacteria, viruses, some types of cancers, and transplanted organs or tissues

**IMMUNOSUPPRESSIVE AGENTS** - medications given to prevent rejection of a transplanted organ or tissue

**IMURAN®** - an immunosuppressive drug used to help prevent the rejection of a transplanted organ. Also known by its chemical name, azathioprine

**IV or INTRAVENOUS** - refers to giving medicines or fluids directly through a vein

**IV CATHETER** - a small needle with a hollow tube inserted into a vein and used to give medicines or fluids

**JAUNDICE** - yellowing of the skin and eyes caused by excess bile products in the blood

**KIDNEY** - one of the two kidney-bean-shaped organs located on both sides of the spine, just above the waist. They function is to remove the body's waste materials and maintain fluid balance through the production of urine

**LIVER ENZYMES** - substances produced by the liver and released into the blood; enzymes are measured to assess liver function

**LIVING-RELATED DONOR (LRD)** - a blood relative who donates an organ

**MATCH** - the compatibility between recipient and donor; the closer the match between donor and recipient, the greater potential for a successful transplant

**MICROEMULSION** - a suspension or mixture of tiny droplets of one liquid in a second liquid, such as the smooth mixture that is formed when Neoral® (cyclosporine capsules and oral solution for microemulsion) combines with fluids in the digestive system

**NEPHROLOGIST** - a physician who studies the kidney and treats kidney disease

**NEUTROPHIL** - a type of white blood cell

**NON-ALCOHOLIC STEATOHEPATITIS (NASH)** – inflammation of the liver caused by a build up of fat in liver cells

**NON-COMPLIANCE** - failure of patients to follow the instructions and recommendations of their medical team, such as not taking medicine as prescribed or not showing up for clinic visits

**ORALLY** - by mouth

**ORGAN PRESERVATION** - methods used to preserve organs while they are out of a donor's body to be transplanted to a recipient

**ORGAN PROCUREMENT AND TRANSPLANTATION NETWORK (OPTN)** - The purpose of the OPTN is to improve the effectiveness of the nation's organ procurement, donation and transplantation system by increasing the availability of and access to donor organs for patients with end-stage organ failure. Administered by UNOS (United Network Organ Sharing), it provides a unique public-private partnership that links all of the professionals involved in the donation and transplantation system.

**ORGAN PROCUREMENT ORGANIZATION (OPO)** - An organization designated by the Centers for Medicare and Medicaid Services (CMS) that is responsible for the procurement of organs for transplantation and the promotion of organ donation. OPOs serve as the vital link between the donor and recipient and are responsible for the identification of donors, and the retrieval, preservation and transportation of organs for transplantation

**ORGAN REJECTION** - an attempt by the immune system to reject or destroy what it recognizes to be a "foreign" presence (for example, a transplanted liver)

**PARACENTESIS** - a procedure in which a small needle is inserted through the abdominal wall to remove fluid that has built up in the abdominal cavity

**PCP (*Pneumocystis Carinii* Pneumonia)** - a type of pneumonia seen primarily in patients whose immune systems are suppressed

**PLATELET** - a small blood cell needed for normal blood clotting

**PORTAL HYPERTENSION** – high blood pressure in the veins that filter blood from the intestines to the liver

**POTASSIUM** - a mineral essential for body function

**PREDNISONE** - a manufactured steroid hormone taken by most transplant recipients of a transplanted organ or tissue to help prevent rejections

**PROGRAF®** - See tacrolimus

**PSYCHIATRIST** - physician who diagnoses and treats mental disorders

**RAPAMYCIN (RAPAMUNE®)** – medicine that belongs to a group of medicines known as immunosuppressive agents used to lower the body's natural immunity and prevent organ rejection in patients who receive kidney transplants.

**REJECTION** - an immune response against grafted tissue in which a recipient's body rejects tissue or organ transferred from a donor

**RENAL** - refers to the kidney

**SENSITIZED** - being immunized, or able to mount an immune response, against an antigen by previous exposure to that antigen

**SHINGLES** - a herpes virus infection that usually affects a nerve, causing pain in one area of the body

**SODIUM** - a component of table salt (sodium chloride); an electrolyte that is the main salt in blood

**STATUS** - indicates the degree of medical urgency for patients awaiting heart or liver transplants

**SURVIVAL RATES** – indicate how many patients or grafts (transplanted organs) are alive or functioning at a set time post transplant

**SYSTOLIC** - the top of the two blood pressure numbers, which measures the maximum blood pressure reached as blood is pumped out of the heart chambers

**TACROLIMUS** – a drug that helps keep the body from rejecting a transplanted organ. Brand name is Prograf®

**THRUSH** - a fungus infection in the mouth

**TRIGLYCERIDES** - a form of fat that the body makes from sugar, alcohol, and excess calories

**T CELLS** - a white blood cell responsible for the body's immunity. T cells can destroy cells infected by viruses, graft cells, and other altered cells

**T-TUBE** - a tube placed in the bile duct that allows bile to drain into a bag outside the body

**TISSUE TYPING** - a blood test performed prior to transplantation to evaluate the closeness of tissue match between the donor and recipient

**UNOS (United Network for Organ Sharing)** a national agency that maintains a national computerized transplant waiting list and helps locate donor organs

**URINARY TRACT INFECTION (UTI)** - an infection of one or more parts of the urinary tract

**VARICES** – enlarged veins in the digestive tract that could bleed

**VENTILATOR** - a machine that helps a patient breathe

**VIRUS** - a germ that causes infection

**WAITING LIST** - After a patient has concluded evaluation by the transplant physician, he/she is added by the transplant center to a national waiting list. Lists are specific to both geographic area and organ type. Each time a donor organ becomes available, UNOS generates a list of potential recipients based on factors that include genetic similarity, organ size, medical urgency, and time a patient has been on the waiting list

**WHITE BLOOD CELLS** - cells in the blood that fight infection; part of the immune system

**WILSON'S DISEASE** – rare inherited disorder that causes a build-up of copper in the liver and other organs of the body