

Glossary

WVU Medicine Transplant Alliance

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ABO Blood Type - The classification of human blood into four groups: A, B, AB, and O. Blood types are based on differences in molecules (proteins and carbohydrates) on the surface of red blood cells.

Active Candidate - A transplant candidate eligible to be considered for organ offers.

Allograft – An organ or tissue transplanted from one person to another.

Allosure – A non-invasive blood test that measures donor DNA from your transplanted organ in your blood to help assess for organ injury.

Antibody - A protein molecule produced by the immune system in response to a foreign body, such as a virus or a transplanted organ. Since antibodies fight the transplanted organ and try to reject it, recipients are required to take anti-rejection (immunosuppressive) drugs.

Antigen - An antigen is any substance that causes your immune system to produce antibodies against it. An antigen may be a foreign substance from the environment, such as chemicals, bacteria, viruses, pollen, or foreign tissues. An antigen may also be formed within the body, as with bacterial toxins.

Biopsy – A procedure that removes a small amount of tissue from the transplanted organ. The sample of tissue is examined under a microscope to look for evidence of rejections or infection in the transplanted organ.

Candidate - A person registered on the organ transplant waiting list as active or inactive.

Compatible Donor - A person whose blood, tissue type, and other medical factors match with the recipient.

Compatibility - The recipient does not have antibodies to the blood group or HLA type of the donor and a straightforward transplant between them would be possible.

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CT (Computed Tomography) Scan – The CT scan is a radiology test that uses a series of x-rays and a computer to create detailed images of your bones and soft tissues.

Cross Match - A blood test to determine compatibility between donor and recipient. A positive cross match indicates incompatibility. If the cross match is "negative," then the transplant may proceed. Cross matching is performed for many organ transplants.

Cytomegalovirus – A common virus that may be present without symptoms in a healthy person but is of higher concern for people with suppressed immune systems.

Deceased Donor - An individual from whom at least one solid organ is recovered for the purpose of transplantation after suffering brain death or cardiac death.

Deceased Donor Transplant - The transplant of an organ from a deceased donor.

Diabetes - A disease in which the pancreas does not manufacture an adequate amount of insulin, or your body is resistant to insulin. As a result, the level of sugar in the blood is too high. Diabetes is a leading factor of heart and kidney disease.

Dialysis - A method of filtering the blood, including removing fluid from blood and balancing chemicals, when the kidneys are unable to do so.

Diastolic Blood Pressure - The bottom number in the blood pressure measurement (80 in a blood pressure of 120/80), indicating the pressure in the arteries when the heart is at rest.

Evaluation - The process of gathering information about the potential transplant candidates.

Gene Expression Profiling – A blood test that measures how your immune system is reacting to the transplanted organ.

Glomerular Filtration Rate (GFR) - A measure used to determine kidney function, the GFR indicates the kidney's ability to filter and remove waste products.

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Hemodialysis - A treatment for kidney failure in which the patient's blood is passed through a filtering machine to remove excess fluid and waste.

High Blood Pressure (hypertension) (HTN) - 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. High blood pressure causes the heart to pump harder to move blood through the body. High blood pressure can cause kidney failure and heart disease if not treated.

Histocompatibility – This is the examination of human leukocyte antigens (HLA) in a patient often referred to as "tissue typing" or "genetic matching." Tissue typing is performed for all donors and recipients in kidney and pancreas transplantation to help match the donor with the most suitable recipients, thereby helping to decrease the likelihood of rejecting the transplanted organ.

Histocompatibility Antigens – There are molecules, also known as Human Leukocyte Antigens (HLA), found on all nucleated cells in the body. Inherited from one's parents, histocompatibility antigens help the immune system to recognize whether or not a cell is foreign to the body. These antigens are used to help determine the compatibility of kidneys for transplantation from one individual to another.

Human Leukocyte Antigen (HLA) - Molecules found on cells in the body that are inherited genetically. In donor-recipient matching, HLAs help to determine compatibility between a donor and recipients.

Inactive Candidate - A waitlist candidate who is temporarily unable to receive organ offers due to certain factors. (Examples: Too sick, too well, on vacation, incomplete testing, etc.)

Immune System – A specialized system of cells and proteins that protect the body from organisms that may cause infection or disease.

Immunization – When the body becomes protected from specific diseases through vaccinations.

Immunosuppressed/Immunocompromised – When a person's immune system is

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weakened to lower the body's ability to fight infection and foreign substances. Being immunosuppressed will help decrease the body's ability to reject your transplanted organ.

Infection – When bacteria, fungi, and viruses invade the body and cause illness.

Informed Consent - A person's voluntary agreement, based upon adequate knowledge and understanding of relevant information, to participate in research or to undergo a diagnostic, therapeutic, or preventive procedure.

Kidney Paired Donation (KPD) - When recipients exchange living donors to increase the number of compatible pairs.

Living Donation - When a living person gives an organ or a portion of an organ for use in a transplant. A kidney or portion of a liver may be donated.

Living Donor - A living person who donates an organ such as a kidney or a segment of the liver for transplantation. Living donors may be blood relatives, emotionally related individuals, or altruistic strangers. These may also include domino heart or liver transplants.

Living Donor Team - Transplant hospital staff whose job is to evaluate and protect the interest of living donors.

Match - When a donor organ is compatible with a recipient for transplant.

Non-adherence – Failure to follow instructions for medical care. This may include not taking medications as prescribed, not obtaining labs as instructed, or unexplained absences at follow-up appointments.

Organ Offer - When a deceased donor organ becomes available for an active candidate for transplant. The Transplant Team is notified with possible organ offers and assesses if the organ is appropriate for the active candidate. If the organ is appropriate, the active candidate may be brought into the hospital to proceed with transplant.

Organ Procurement and Transplant Network (OPTN) - OPTN links professions involved in donation and transplant systems. They focus on improving systems so that more life-saving organs are available for transplant.

Organ Procurement Organization (OPO) - In the United States, an OPO is a non-profit organization that is responsible for the evaluation and procurement of deceased-donor organs for organ transplantation.

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Panel Reactive Antibody (PRA) - The percent PRA value is a measure of a patient's level of sensitization to HLA antigens. It is the percentage of cells from a panel of blood donors against which a potential recipient's serum reacts. The PRA reflects the percentage of the general population that a potential recipient makes antibodies (is sensitized) against. For example, a patient with a PRA of 80 percent will be incompatible with 80 percent of potential donors. Kidney patients with a high PRA are given priority on the waiting list. The higher the PRA, the more sensitized a patient is to the general donor pool, and thus the more difficult it is to find a suitable donor. A patient may become sensitized because of pregnancy, a blood transfusion, or a previous transplant.

Peritoneal Dialysis - A treatment technique for kidney failure that uses the patient's own body tissues inside of the abdominal cavity to act as a filter. The intestines lie in the abdominal cavity, the space between the abdominal wall and the spine. A plastic tube called a "dialysis catheter" is placed through the abdominal wall into the abdominal cavity. A special fluid is then flushed into the abdominal cavity and washes around the intestines. The lining (peritoneum) of the abdominal cavity and of intra-abdominal organs act as a filter between this fluid and the blood stream. By using different types of solutions, waste products and excess water can be removed from the body through this process.

Preeclampsia - A condition in pregnancy characterized by abrupt hypertension (sharp rise in blood pressure), albuminuria (large amount of protein/albumin in urine), and swelling of the hands, feet, and face.

Prospera – A non-invasive blood test that measures donor DNA from your transplanted organ in your blood to help assess for organ injury.

Recipient - A candidate that has received an organ transplant.

Rejection – A process in which the body's immune system attacks your transplanted organ, usually resulting in damage to the organ.

Systolic Blood Pressure – The “top number” of a blood pressure measurement. The systolic pressure measures the pressure as the heart contracts to pump blood to the body.

Tissue Typing - A blood test that helps evaluate how closely the tissues of the

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donor match those of the recipient.

Transplant Program - A hospital program that evaluates patients for transplant, registers patients on the national waiting list, performs transplant surgery, and provides care before, during, and after transplantation.

Transplant Team - The diverse group of professionals at the Transplant Program who work to make a transplant successful. Each person on the "transplant team" is an expert in a different area of transplantation.

United Network for Organ Sharing (UNOS) - The private, nonprofit membership organization that coordinates the nation's transplant system through HRSA's OPTN contract. As an OPTN contractor, UNOS is responsible for meeting all contract requirements. Since the first OPTN contract award in 1986, UNOS has established and continually strives to improve tools, systems, and quality processes that support OPTN contract objectives and requirements.

These include:

- Managing the national organ transplant waiting list
- Collecting, managing, and reporting of sensitive clinical data in a secure, fail-safe environment
- Facilitating an open, inclusive forum for development and continuous refinement of evidence-based policies and standards
- Member and policy performance assessment to ensure equitable, safe treatment of candidates and recipients.
- Increasing donation and making the most of every organ that is donated through professional education, outcomes research, patient services and resources, and public and professional education
- Continuously improving the care, quality of life, and outcomes of organ transplant candidates and recipients

Vital Signs – The measurement of your temperature, blood pressure, pulse, and

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weight. Monitoring of vital signs can help to detect rejection or infection.

Waiting List - A computerized list of candidates that are waiting to be matched with a specific deceased donor organ for transplant. When a donor organ becomes available, the matching system generates a new, more specific list of potential recipients based on specific criteria.

Waiting Time - The amount of time a candidate is on the national wait list. Waiting times can vary depending on many factors.