Common Pre-Transplant Tests and Procedures

Blood tests- The most common test (called a "Complete Blood Count" or CBC) measures the number of red blood cells, white blood cells, and platelets in the blood. In addition to blood cell counts, tests to measure the values of many chemicals in the blood (such as a "metabolic panel") can indicate how other parts of the body are functioning, including your liver, kidneys, heart and lungs. A metabolic panel is one test within a chemistry panel which are groups of tests that are ordered to determine a person's general health status.

Bone marrow tests- Blood cells (white blood cells, red blood cells, and platelets) are made in the marrow. Bone marrow tests allow doctors to look at the fluid (inner liquid part of the marrow also known as the spongy part of the bone) and tissue in the marrow to determine whether cancer or another disease is affecting blood cell production or the structure of the marrow. Marrow tests can help determine the type and extent of the disease. Certain changes to blood cells can be detected in marrow samples before they can be detected in blood samples.

Imaging tests- Imaging or radiology tests create pictures of the chest, abdomen (belly), head, neck, and other parts of the body. Examples of imaging tests include X-rays, ultrasound, CT scans, MRI, and PET scans. Imaging tests are generally used to look for signs of disease or to check if the cancer (tumors or masses of cells) has spread to other areas.

Some of the tests below may be ordered for you before your transplant admission:

- **Echocardiogram**- An echocardiogram (echo) is a test that uses high frequency sound waves to make pictures of your heart. This tests helps your doctor to find out the size and shape of your heart, how your heart moves and the heart's pumping strength.

- **EKG (Electrocardiogram)-**An EKG records the electrical signals in your heart. It's a common test used to detect heart problems and monitor the heart's status in many situations.
- **Pulmonary Function Tests (PFTs**)- PFTs are a group of tests that measure how well your lungs work. This includes how well you're able to breathe and how effective your lungs are at being able to bring oxygen to the rest of your body.
- **Chest X-Ray (CXR)-** A chest x ray produces images of the lungs, heart, airway, blood vessels and the bones of the spine and chest.
- **Positron Emission Tomography (PET) Scan** – A PET scan is an imaging test that measures blood flow, oxygen use, glucose metabolism and other body processes. It is commonly used to detect and monitor cancers because it shows tissue abnormalities at the cellular level.
- **Computed Tomography (CT or Cat) Scans**- A CT scan is an imaging test that combines a series of X-ray images taken from different angles around your body and uses computer processing to create cross-sectional images (slices) of the bones, blood vessels and soft tissues inside your body. CT scan images provide more-detailed information than plain X-rays do.
- **Magnetic Resonance Imaging (MRI)-** Is a medical imaging technique used in radiology to form pictures of the anatomy and the physiological processes of the body. MRI scanners use strong magnetic fields and radio waves to generate images of the organs of the body.
- **Skeletal Survey**- (also called a bone survey) is a series of x-rays of all the bones in the body.
- **Bone Marrow Biopsy and Aspiration-** Samples of fluid, tissue and cells are examined under a microscope to look for chromosomal changes and other changes in the cells. This test is used to evaluate the response to cancer treatment and to further identify the type of abnormality in the bone marrow.

- **Lumbar Puncture (LP)** - is a medical procedure in which a needle is inserted into the spinal canal, most commonly to collect cerebrospinal fluid (CSF) for diagnostic testing.
- **24 Hour Urine Collection**- A 24-hour urine test is used to check kidney function and measures certain proteins present in the urine.