## What is Bone Marrow?

Bone Marrow is soft, spongy tissue found inside some of the body's bones, such as legs, arms and hips. Bone Marrow is the body's 'stem cell factory'. Stem cells are vital cells which go on to create the body's blood cells; platelets, red blood cells and white blood cells, the primary agents of the body's immune system.

Healthy people have a reserve of bone marrow which is constantly being renewed. Patients with some blood cancers or blood disorders don't have these reserves, or their bone marrow isn't working properly to provide them with the right amount of properly formed cells. For some patients the only treatment is a transplant of healthy bone marrow (stem cells) from a well matched donor to replace their own bone marrow.

## **Bone Marrow Transplant (Stem Cell Transplant)**

Bone marrow transplant is the process of replacing diseased or damaged bone marrow with healthy stem cells. The original bone marrow is eradicated using high dose chemotherapy or radiation for a number of days to make room for the new donor cells. If the transplant is successful the transplanted stem cells start to produce new, healthy blood cells.