Therapy Timelines

- Consultation
- Signing of Informed Consent
- Blood Extraction for Circulating Tumor Cells and Blood Tests
- Hematology Clearance
- Growth Factor Administration
- Admission and Central Line Insertion
- Leukapheresis (Stem cell collection)
- Dendritic Cell Growth and Maturation
- Vaccination and Interferon-gamma Analysis

MOLECULAR DIAGNOSTICS AND CELLULAR THERAPEUTICS CENTER

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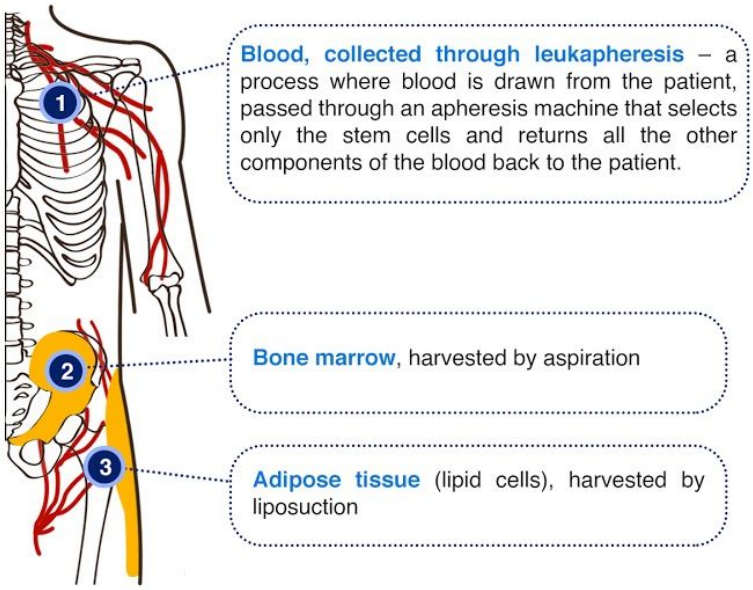
PERPETUAL HELP MEDICAL CENTER - LAS PIÑAS

STEM CELL THERAPY

What are Stem Cells?

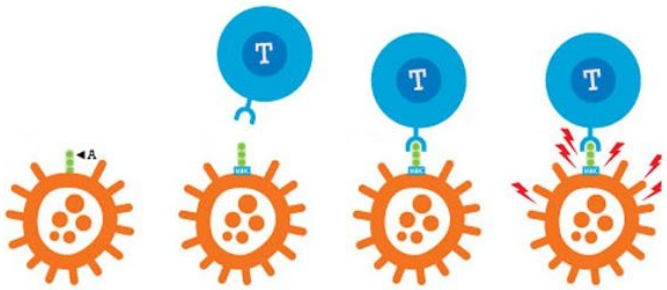
Stem cells are a special type of cells that can transform into other cells or tissue types in the body. This ability enables them to replace cells that are damaged and aging. This ability has recently been tapped for therapeutic applications particularly in replacing or controlling defective cells or tissues in patients who have developed certain diseases or defects.

There are at least three (3) sources of Stem Cells allowed for therapy:



Immune cell therapy

A form of cell therapy where a patient receives immune cells to fight cancer. This refers to a process where blood stem cells (i.e. CD34+ cells) from the patient (i.e. autologous) are collected through a leukapheresis procedure and grown in the laboratory to become dendritic cells. A dendritic cell (DC) is a specific type of immune cell, an antigen-presenting, that teaches a patient's immune system to fight a specific disease, including cancer. During laboratory culture, the dendritic cells are fed with tumor fragments (i.e., tumor peptide antigens) formulated from a proprietary antigenic peptide collection, which can be packaged by DC receptors and displayed on the surface for specific recognition by T-cells, capacitating them to become cytotoxic T-cells with a special ability to destroy tumor cells.



What is an Immune Cell Therapy Vaccine (ICTV)?

It is a form of active immunotherapy using dendritic cells to trigger an immune response against diseases including cancer. A mixture of peptide antigens based on the patient's circulating tumor cell profile or the tumor block are introduced to dendritic cells for uptake and surface display (i.e. maturation process) to enable them to activate T-cells and once ready are injected into the patient's skin like an ordinary vaccine. Once inside the body, they migrate to the lymph nodes where they activate white blood cells (i.e. specifically T-cells) to become killer or cytotoxic T-cells (i.e. able to recognize tumor markers) and attack the cancer cells resulting to their gradual eradication or stabilization of the disease process.

ICTV is safe because all the components of the vaccine come from the patient. In fact, different types of cancer can be targeted for autologous **ICTV** at Perpetual Help Medical Center-Las Pinas.

When Can It Be Done?

Anytime, preferably before any other form of treatment is given because the stem cells have to be harvested. It can sometimes be used by itself to treat different types of cancer which are unresponsive to the usual treatment or it can be used as an adjunct to other standard therapies (e.g. chemotherapy or radiotherapy) to boost their effects. Side-effects arising from other cancer treatments can also be minimized with this form of therapy.

The Stem Cell Therapy Center

Perpetual Help Medical Center - Las Piñas Molecular Diagnostic and Cell Therapy Center (PHMC-MDCTC) offers services that can bring change for you and your loved ones. With the available therapies in the center, cancer patients have more treatment options that give them a better chance of healing and recovery from the disease. Immune Cell Therapy Vaccination (ICTV) and Stem Cell Regenerative Therapy are proven to be safe. ICTV can also minimize other cancer treatment side-effects.