

Immunotherapy

WHAT IS IMMUNOTHERAPY?

Immunotherapy is a medical treatment that boosts your immune system, your body's natural defense system, to help prevent and treat disease. In the case of cancers, immunotherapy works by training your immune system, to identify and attack cancer cells.

HOW DOES IT WORK?

Imagine your immune system as a team of superheroes who fight invaders such as germs, bacterias, viruses, and cancer. When your immune system identifies an invader, it attacks. Immunotherapy can be administered through an **infusion** (using an IV), **orally** (in a pill or liquid form), or, in the cases of some skin cancers, **topically** (on-skin).

TYPES OF IMMUNOTHERAPY

There are several types of immunotherapy treatments, including:

- **Immune Checkpoint Inhibitors:** Immune cells, known as T cells, act like the body's security guards, looking for invaders. But cancer cells are sneaky and can trick the T cells into ignoring them so they can hide and divide. These immune checkpoint inhibitors reawaken the T cells to recognize and fight the cancer cells.
- **Monoclonal Antibodies (mAbs):** These are antibodies, like soldiers made in a lab, that target and fight cancer cells, helping your immune system to destroy them.
- **Cell Therapies:** These treatments, like CAR-T cell therapy, take cells from your body, then genetically change them so they can be put back in to your body and fight cancer. It's most often used to treat blood cancers, such as leukemia, lymphoma and multiple myeloma.
- **Cancer Vaccines:** Vaccines can teach the immune system to fight germs that can cause cancer or attack cancer cells that are already there.
- **Oncolytic Viruses:** These viruses are like soldiers trained in a lab who find and destroy only cancer cells - leaving your healthy cells alone.