

Unleashing the power of the immune system to defeat cancer

Immunotherapy — a medical treatment that mobilizes the body's own natural defense system to fight diseases — is revolutionizing the way we treat cancer. There are several different immunotherapy approaches that treat a variety of cancers. Some are approved for use; others are being tested in clinical trials.

FIVE TYPES OF CANCER IMMUNOTHERAPY



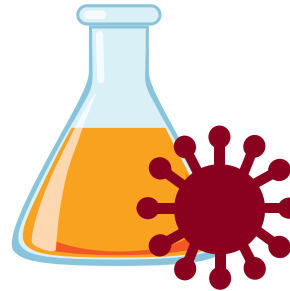
Cellular therapy

The transfer of human cells to replace diseased cells with healthy, functional ones. Stem cell transplant and chimeric antigen receptor (CAR) T-cell therapy are examples of cellular therapies.



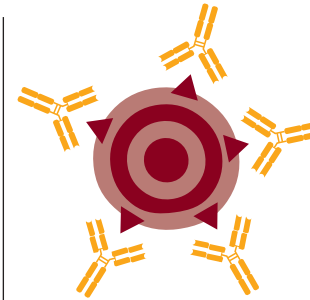
Immunomodulators

Medications that regulate and boost parts of the immune system. Checkpoint inhibitors and cytokines are immunomodulators.



Oncolytic virus therapy

Lab-modified viruses that infect and kill cancer cells without harming normal cells. Some of the viruses are found in nature, while others are modified in a lab.



Monoclonal antibodies

Man-made proteins that attack a specific part of a cancer cell. Some monoclonal antibodies are described as targeted therapies.



Cancer treatment vaccines

Medicines that train the Immune system to recognize and destroy cancer cells. Unlike cancer prevention vaccines, these are designed for people who already have cancer.

From understanding how the immune system works at the molecular level to clinical trials testing the newest and most promising immunotherapies, UChicago Medicine research scientists and physicians are helping shape the future of cancer immunotherapy.