

TYPES OF ADOPTIVE T-CELL THERAPY

There are three main types of adoptive T-cell therapy. As of July 31, 2020, only one type, chimeric antigen receptor (CAR) T-cell therapy, is approved by the U.S. Food and Drug Administration.

CAR T-Cell Therapy

T cells are harvested from a patient's blood and genetically modified in the laboratory to have a new gene that encodes a protein called a CAR. The T cells are expanded in number and infused back into the patient. The CAR modification targets the T cells specifically to the patient's cancer cells and triggers them to attack when they get there.



T-Cell Receptor (TCR) T-Cell Therapy

T cells are harvested from a patient's blood and genetically modified in the laboratory to have a new gene that encodes a protein called a TCR. The T cells are expanded in number and infused back into the patient. The TCR modification targets the T cells specifically to the patient's cancer cells and triggers them to attack when they get there.



Tumor-Infiltrating Lymphocyte (TIL) Therapy

T cells are harvested directly from a patient's tumor, expanded in number in the laboratory, and infused back into the patient. Many of these T cells naturally recognize and kill the patient's cancer cells.

