

## TYPES OF ADOPTIVE T-CELL THERAPY

There are three main types of adoptive T-cell therapy (177). As of July 31, 2018, only one type, chimeric antigen receptor (CAR) T-cell therapy, had been 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.

Adapted from (1)

American Association for Cancer Research (AACR)  
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