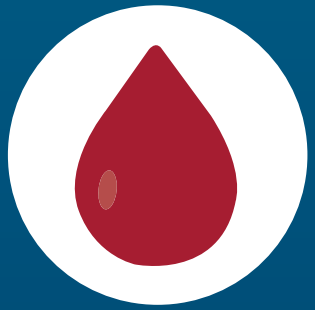
THE UNIVERSITY OF KANSAS
CANCER CENTER

CAR T-Cell Therapy

Harnessing the immune system to fight cancer

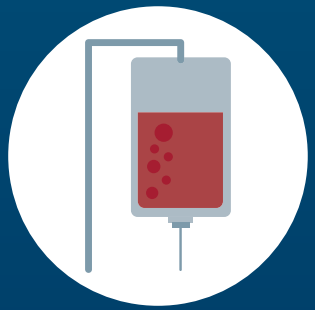
A cancer breakthrough is making news and helping people from Kansas City, across the country and around the world. The University of Kansas Cancer Center was selected among the world's first providers of FDA-approved CAR T-cell therapy. By removing, supercharging and returning white blood cells – reengineered to seek and destroy cancer cells – this precision medicine offers new potential to cure cancers and save lives.

Chimeric antigen reception (CAR) T-cell therapy uses reengineered versions of a patient's cells to find cancer cells and defeat them.

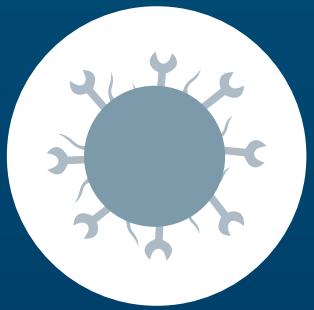


1 T cells (integral to the immune system) are extracted from the patient.

2 Scientists modify the T cells in a lab, training them to detect cancer cells.



3 While the T cells multiply in the lab, the patient receives chemotherapy to reduce the number of cancer cells.



4 The reengineered T cells are returned to the patient's bloodstream, where they seek out and kill remaining cancer cells.

NCI Cancer Center
A Cancer Center Designated by the National Cancer Institute