Autologous CD138-specific CAR T-cells

National Cancer Institute

Source

A preparation of autologous T-lymphocytes that have been engineered to express a chimeric antigen receptor (CAR) specific for syndecan-1 (CD138), with potential immunomodulating and antineoplastic activities. Upon administration, the autologous CD138 CAR-expressing T-cells target and induce selective toxicity in syndecan-1-expressing tumor cells. Syndecan-1, a type 1 transmembrane proteoglycan and tumor-associated antigen (TAA), is overexpressed in a variety of cancer cells and plays a key role in the regulation of cell growth, differentiation, and adhesion.