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Human Anti-CD30 CAR-expressing Autologous T-lymphocytes

National Cancer Institute

Source

National Cancer Institute. *Human Anti-CD30 CAR-expressing Autologous T-lymphocytes*. NCI Thesaurus. Code C156933.

A preparation of autologous T-lymphocytes that have been genetically modified to express a chimeric antigen receptor (CAR) consisting of a single chain variable fragment (scFv) derived from a human anti-CD30 monoclonal antibody, with potential immunostimulating and antineoplastic activities. Upon administration, the human anti-CD30 CAR-expressing autologous T-lymphocytes specifically recognize and bind to CD30-expressing tumor cells, resulting in tumor cell lysis. CD30, a cell surface receptor and a member of the tumor necrosis factor (TNF) receptor superfamily, is transiently expressed on activated lymphocytes and is constitutively expressed in hematologic malignancies. Compared to CAR-T cells that use murine scFv-based CARs, CAR-T cells containing CARs with human scFv regions reduces the immunogenicity of the CAR-T cells and may improve their longevity.