Anti-CD19-CAR FMC63-28Z Retroviral Vector-transduced Allogeneic T-lymphocytes

National Cancer Institute

Source

National Cancer Institute. Anti-CD19-CAR FMC63-28Z Retroviral Vector-transduced Allogeneic T-lymphocytes. NCI Thesaurus. Code C111041.

Allogeneic T-lymphocytes derived from peripheral blood mononuclear cells (PBMC) transduced with a retroviral vector expressing a chimeric antigen receptor (CAR) consisting of both the light and heavy chain variable regions of anti-CD19 monoclonal antibody FMC63, coupled to the molecule CD28 and the signaling domain of the zeta chain of the T-cell receptor (TCR) (FMC63-28Z), with potential immunomodulating and antineoplastic activities. Upon transfusion, the anti-CD19-CAR FMC63-28Z retroviral vector-transduced allogeneic T lymphocytes specifically recognize and kill CD19-expressing tumor cells. CD19 antigen is a B-cell specific cell surface antigen, which is expressed in all B-cell lineage malignancies and normal B-cells.