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# Autologous PBTL CD19CAR-28 zeta

National Cancer Institute

## Source

National Cancer Institute. *Autologous PBTL CD19CAR-28 zeta*. NCI Thesaurus. Code C78823.

A preparation of autologous peripheral blood T-lymphocytes (PBTL) that have been genetically modified to express the chimeric antigen receptor (CAR) anti-CD19/CD3 zeta chain fusion protein coupled to the intracellular signal domain of CD28 antigen, with potential immunostimulating and antineoplastic activities. Upon administration, autologous PBTL CD19CAR-28 zeta may stimulate host cytotoxic T lymphocyte (CTL) and antibody responses against CD19-expressing tumor cells, resulting in tumor cell lysis. CD19 antigen is a B-cell specific cell surface antigen expressed in all B-cell lineage malignancies. CD3 zeta is one of several membrane-bound polypeptides found in the T-cell receptor (TCR)/CD3 complex and regulates the assembly of complete TCR complexes and their expression on the cell surface. CD28 is essential for CD4+ T-cell proliferation, interleukin-2 production, and T-helper type-2 (Th2) development.