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Autologous Anti-CD22 CAR-4-1BB-TCRz-transduced T-lymphocytes CART22-65s

National Cancer Institute

Source

National Cancer Institute. Autologous Anti-CD22 CAR-4-1BB-TCRz-transduced T-lymphocytes CART22-65s. NCI Thesaurus. Code C156251.

Autologous human T-lymphocytes transduced with a recombinant lentiviral vector encoding a chimeric antigen receptor (CAR) consisting of an anti-CD22 human single chain variable fragment (scFv) and linked to the co-stimulatory domain 4-1BB (CD137) coupled to the zeta chain of the TCR/CD3 complex (CD3-zeta), with potential immunostimulating and antineoplastic activities. Upon reintroduction into the patient, the autologous anti-CD22 CAR-4-1BB-TCRz -transduced T-lymphocytes CART22-65s express anti-CD22-CAR on their cell surfaces and bind to the CD22 antigen on tumor cell surfaces, resulting in lysis of CD22-expressing tumor cells. CD22, a B-lineage-restricted, transmembrane phosphoglycoprotein, is expressed on malignant B-cells.