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Anti-mesothelin CAR Vector-transduced Autologous T-lymphocytes

National Cancer Institute

Source

National Cancer Institute. *Anti-mesothelin CAR Vector-transduced Autologous T-lymphocytes*. NCI Thesaurus. Code C124650.

Genetically modified, autologous T-lymphocytes transduced with a retroviral vector encoding a chimeric antigen receptor (CAR) consisting of an anti-human tumor-associated antigen (TAA) mesothelin single chain variable fragment (scFv), the intracellular CD3 zeta T-cell receptor domain and the 4-1BB (cd137) costimulatory domain, with potential immunomodulating and antineoplastic activities. After isolation, transduction, expansion in culture, and reintroduction into the patient, the anti-mesothelin CAR vector-transduced autologous T-lymphocytes specifically target and kill mesothelin-expressing tumor cells. Mesothelin, a cell surface glycoprotein involved in cell adhesion, is overexpressed in a variety of cancer cell types.