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# Mesothelin-specific Chimeric Antigen Receptor-engineered Peripheral Blood Lymphocytes

National Cancer Institute

## Source

National Cancer Institute. *Mesothelin-specific Chimeric Antigen Receptor-engineered Peripheral Blood Lymphocytes*. NCI Thesaurus. Code C101773.

A preparation of peripheral blood lymphocytes (PBLs) transduced with a retroviral vector encoding a T cell chimeric antigen receptor (CAR) specific for mesothelin with potential immunostimulatory and antineoplastic activities. After transduction, expansion in culture, and reintroduction into the patient, the mesothelin-specific chimeric antigen receptor-engineered PBLs bind to tumor cells expressing mesothelin. This may stimulate the secretion of cytokines and result in cell lysis of mesothelin-expressing cancer cells. Mesothelin, a cell surface glycoprotein involved in cell adhesion, is overexpressed in many epithelial-derived cancers.