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Anti-CEA TCR Retroviral Vector-Transduced Autologous Peripheral Blood Lymphocytes

National Cancer Institute

Source

National Cancer Institute. *Anti-CEA TCR Retroviral Vector-Transduced Autologous Peripheral Blood Lymphocytes*. NCI Thesaurus. Code C79842.

Autologous human peripheral blood lymphocytes (PBLs), transduced with a retroviral vector encoding both the alpha and beta chains of a T cell receptor (TCR) specific for the carcinoembryonic antigen (CEA), with potential immunostimulating and antineoplastic activities. After transduction, expansion in culture, and reintroduction into the patient, anti-CEA TCR retroviral vector-transduced autologous lymphocytes bind to tumor cells expressing CEA, which may result in cytokine expression, activation and proliferation of T-cells, and a specific cytotoxic T-lymphocyte (CTL) response against CEA-expressing tumor cells. The tumor-associated antigen (TAA) CEA is overexpressed by a variety of cancer cell types, including those of the gastrointestinal tract, lung, and breast.