Autologous Anti-HPV-16 E6 T-cell Receptor Gene-engineered Peripheral Blood Lymphocytes

National Cancer Institute

Source

National Cancer Institute. Autologous Anti-HPV-16 E6 T-cell Receptor Gene-engineered Peripheral Blood Lymphocytes. NCI Thesaurus. Code C118850.

Human autologous peripheral blood lymphocytes (PBLs) transduced with a retroviral vector encoding a T cell receptor (TCR) that is specifically directed against the viral oncoprotein human papillomavirus type 16 (HPV-16) E6, with potential antineoplastic activity. Upon isolation, transduction, expansion ex vivo, and reintroduction into the patient, the autologous anti-HPV-16 E6 TCR gene-engineered PBLs bind to HPV-16 E6-expressing tumor cells. This may result in a specific cytotoxic T-lymphocyte (CTL)-mediated killing of HPV-16 E6-positive cancer cells. HPV-16 E6, a cell surface glycoprotein, is overexpressed by a variety of HPV-associated cancers and is absent from healthy human tissues.