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# CXCR2-transduced Autologous Tumor Infiltrating Lymphocytes

National Cancer Institute

## Source

National Cancer Institute. *CXCR2-transduced Autologous Tumor Infiltrating Lymphocytes*. NCI Thesaurus. Code C120001.

A preparation of autologous tumor infiltrating lymphocytes (TILs) that are transduced, ex vivo, with a retroviral vector encoding a gene for CXC chemokine receptor 2 (CXCR2), with potential antineoplastic activity. Upon administration of the CXCR2-transduced autologous TILs, the CXCR2-expressing T-cells selectively migrate toward tumor cells expressing CXCR2 ligands, which leads to tumor cell killing. CXCR2 expression allows for optimal TIL migration towards tumor cells and enhances the TILs anti-tumor activity. This leads to a reduction in both tumor cell proliferation and survival. CXCR2, a transmembrane protein also known as IL-8 receptor B (IL-8RB), plays a key role in inflammation and cancer progression. Certain CXCR2 ligands, such as CXCL1 and CXCL8 (IL-8), are expressed by tumor cells.