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# Autologous Anti-HLA-A\*02/AFP TCRm-expressing T-cells ET140202

National Cancer Institute

## Source

National Cancer Institute. *Autologous Anti-HLA-A\*02/AFP TCRm-expressing T-cells ET140202*. NCI Thesaurus. Code C162260.

A preparation of autologous T-lymphocytes that have been transduced with a lentiviral vector to express a T-cell receptor mimetic (TCRm) antibody synthesized by a proprietary phage display platform, targeting the immunogenetic human tumor-associated antigen (TAA) alpha-fetoprotein (AFP) complexed with human leukocyte antigen (HLA)-A\*02 (HLA-A\*02/AFP), with potential antineoplastic and immunomodulatory activities. Upon administration, the autologous anti-HLA-A\*02/AFP TCRm-expressing T-cells ET 140202 specifically recognize and selectively bind to AFP peptides presented by HLA-A\*02. This results in cytotoxic T-lymphocyte (CTL)-mediated elimination of AFP-expressing tumor cells. AFP, an intracellularly expressed fetal glycoprotein rarely expressed in adult tissues, is overexpressed in certain tumors of endodermal origin and plays a key role in tumor cell proliferation and survival. AFP is processed into peptides and presented by class I major histocompatibility complexes (MHCs) on the surface of tumor cells.