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Autologous HPV16 E7-specific HLA-A*02:01-restricted TCR Gene Engineered Lymphocytes KITE-439

National Cancer Institute

Source

National Cancer Institute. *Autologous HPV16 E7-specific HLA-A*02:01-restricted TCR Gene Engineered Lymphocytes KITE-439*. NCI Thesaurus. Code C159977.

A preparation of autologous T-lymphocytes that have been genetically modified to express a T-cell receptor (TCR) specific for the human leukocyte antigen (HLA)-A*02:01-restricted human papillomavirus type 16 isoform E7 protein (HPV16 E7) with potential antineoplastic activity. Upon isolation, transduction, expansion ex vivo and re-introduction into the patient, the autologous HPV16 E7-specific HLA-A*02:01-restricted T-lymphocytes KITE-439 target and bind HPV16 E7-expressing tumor cells. This may lead to cytotoxic T-lymphocyte (CTL)-mediated elimination of tumor cells expressing the HPV16 E7 antigen. HPV16 E7, a cell surface glycoprotein and tumor-associated antigen (TAA), is overexpressed in various HPV-mediated cancers.