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# Autologous LMP1/LMP2/EBNA1-specific HLA-A02:01/24:02/11:01-restricted TCR-expressing T-lymphocytes YT-E001

National Cancer Institute

## Source

National Cancer Institute. *Autologous LMP1/LMP2/EBNA1-specific HLA-A02:01/24:02/11:01-restricted TCR-expressing T-lymphocytes YT-E001*. NCI Thesaurus. Code C162627.

A preparation of autologous T-lymphocytes that have been transduced with a lentiviral vector encoding a T-cell receptor (TCR) specific for human leukocyte antigen (HLA)-A02:01/24:02/11:01-restricted Epstein-Barr virus (EBV) latent membrane proteins (LMP) 1 and 2, and EBV nuclear antigen 1 (EBNA1), with potential antineoplastic activity. Upon administration, the autologous LMP1/LMP2/EBNA1-specific, HLA-A02:01/24:02/11:01-restricted TCR-expressing T-lymphocytes YT-E001 recognize and bind to HLA-presented EBV peptides, which may promote cell death and inhibit the growth of tumor cells expressing LMP1, LMP2 or EBNA1. LMP1, LMP2, and EBNA1 are expressed in various, EBV-associated malignancies, including nasopharyngeal cancer and EBV-positive Hodgkin lymphoma.