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CMVpp65-A*0201 Peptide Vaccine

National Cancer Institute

Source

National Cancer Institute. *CMVpp65-A*0201 Peptide Vaccine*. NCI Thesaurus. Code C78467.

A peptide-based cancer vaccine containing a mutated form of the HLA-A*0201-restricted cytomegaloviral epitope CMVpp65(495-503) with potential immunostimulatory and antitumor activities. Upon subcutaneous administration, CMVpp65-A*0201 peptide vaccine may stimulate a cytotoxic T lymphocyte (CTL) response against CMV-positive cells, resulting in cell lysis. HLA-A*0201 is an MHC class I molecule that presents antigenic peptides to CD8+ T cells; epitope design restricted to epitopes that bind most efficiently to HLA-A*0201 may improve antigenic peptide immunogenicity. CMVpp65, a tegument protein of the herpes virus CMV, is the main viral antigen found in peripheral blood mononuclear cells (PBMCs) after viral infection and may activate cell-mediated immunity.