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HLA-A*0201-restricted TRP2-gp100-EphA2-HER2 Multipeptide Vaccine

National Cancer Institute

Source

National Cancer Institute. *HLA-A*0201-restricted TRP2-gp100-EphA2-HER2 Multipeptide Vaccine*. NCI Thesaurus. Code C84844.

A cancer vaccine containing four HLA-A*0201-restricted peptide epitopes with potential immunostimulatory and antitumor activities. Vaccine peptide epitopes are derived from the tumor associated antigens (TAAs) tyrosinase-related protein 2 (TRP2), glycoprotein 100 (gp100), Ephrin receptor A2 (EphA2) and human epidermal growth factor receptor 2 (HER2). Upon administration, HLA-A*0201-restricted TRP2-gp100-EphA2-HER2 multipeptide vaccine may stimulate a cytotoxic T lymphocyte (CTL) response against TRP2-gp100-EphA2-HER2-expressing tumor cells, resulting in tumor cell lysis and decreased tumor cell proliferation. 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.