

Abstract

The human papillomaviruses (HPV) are the etiological agent of cervical cancer. Their oncoproteins E6 and E7 are involved in the transformation of an infected cell into a neoplastic cell, thereby they are the target antigens for the development of DNA vaccines. Helper epitopes activating CD4⁺ T cells are under study because they enhance the efficacy of DNA vaccines through increasing the number of cytotoxic T lymphocytes and thereby removal of the tumor. There are already being used epitopes derived directly from oncoproteins, synthetic epitopes or bacterial epitopes for the general enhancement of the immune response. Sufficient number of comparative studies which would establish the exactly most efficient helper epitopes has not been made. The research aims at combining more peptide types using immunostimulatory molecules.