Immunotherapy Regimen MKC-1106-MT

National Cancer Institute

Source

National Cancer Institute. Immunotherapy Regimen MKC-1106-MT. NCI Thesaurus. Code C77971.

An immunotherapy regimen containing three components: a plasmid encoding portions of the two melanoma-associated antigens Melan A (also called MART-1) and tyrosinase and two synthetic analogs of Melan-A and tyrosinase antigen epitopes with potential immunostimulating and antitumor activities. First, the plasmid is injected directly into lymph nodes in order to sensitize or prime antigen-presenting cells (APCs) and central memory T cells in lymph nodes to plasmid-expressed Melan A and tyrosinase. After several priming injections with plasmids, the Melan A and tyrosinase synthetic epitope analogs are injected directly into lymph nodes; upon binding to major histocompatibility complex (MHC) molecules on APC cell surfaces, these synthetic epitope analogs may stimulate a "primed" cytotoxic T lymphocyte (CTL) response against melanoma tumor cells, resulting in tumor cell lysis. Melan-A and tyrosinase are overexpressed by melanoma tumor cells.