Open Peer Review on Qeios

Therapeutic Breast/Ovarian/Prostate Peptide Cancer Vaccine DPX-0907

National Cancer Institute

Source

National Cancer Institute. <u>Therapeutic Breast/Ovarian/Prostate Peptide Cancer Vaccine</u> <u>DPX-0907</u>. NCI Thesaurus. Code C91077.

A lipid-based multi-peptide cancer vaccine targeted against multiple cancers with immunopotentiating activity. Therapeutic breast/ovarian/prostate peptide cancer vaccine DPX-0907 is a lyophilized liposomal proprietary preparation comprised of 7 tumorspecific HLA-A2-restricted epitopes (TAAs): Topoisomerase II alpha, B-cell receptorassociated protein 31 (CDM protein), TNF-alpha-converting enzyme (TACE/ADAM17), Abelson homolog 2 (Abl2), gamma catenin (Junction plakoglobin), epithelial discoidin domain receptor 1 (EDDR1) and integrin beta 8 subunit. Upon vaccination, the lyophilized antigen/adjuvant/liposome complex is re-suspended in Montanide 1SA51 VG to create a depot effect, thereby presenting the TAAs to the immune system for a prolonged period of time. This may stimulate a potent cytotoxic T-lymphocyte (CTL) immune response against cancer cells that express these 7 TAAs and share epitopes with the vaccine epitope peptides, resulting in tumor cell lysis. The 7 TAAs are overexpressed on the surface of breast/ovarian and prostate cancer cells and play an important role in tumor cell growth and survival.