HTERT mRNA/Survivin Peptide-double-loaded Autologous Dendritic Cell Vaccine

National Cancer Institute

Source

National Cancer Institute. hTERT mRNA/Survivin Peptide-double-loaded Autologous Dendritic Cell Vaccine. NCI Thesaurus. Code C99116.

A cancer vaccine containing autologous dendritic cells (DCs) that are pulsed with mRNA encoding human telomerase reverse transcriptase (hTERT) and survivin peptide, with potential immunostimulatory and antineoplastic activities. Upon administration, hTERT mRNA/survivin peptide-double-loaded autologous dendritic cell vaccine may elicit an immune response against cancer cells expressing hTERT and survivin by activating cytotoxic T-cells (CTLs), natural killer cells (NKs), and B-lymphocytes. The tumor associated antigens (TAAs) hTERT, the catalytic subunit of human telomerase, and survivin, a member of the inhibitor of apoptosis (IAP) family of proteins, may be upregulated in certain tumor cell types and play key roles in tumor cell growth and survival.