

[Open Peer Review on Qeios](#)

WT1/PSMA/hTERT-encoding Plasmid DNA INO-5401

National Cancer Institute

Source

National Cancer Institute. *WT1/PSMA/hTERT-encoding Plasmid DNA INO-5401*. NCI Thesaurus. Code C148480.

A preparation composed of three separate DNA plasmids encoding the tumor-associated antigens (TAAs) Wilms tumor gene-1 (WT 1), prostate-specific membrane antigen (PSMA) and human telomerase reverse transcriptase (hTERT), with potential immunostimulating and antineoplastic activities. Upon intramuscular delivery and electroporation of the WT 1/PSMA/hTERT-encoding plasmid DNA INO-5401, the genes are translated into their respective proteins inside the cell. The expressed proteins activate the immune system and induce a cytotoxic T-lymphocyte (CTL)-mediated response against cells expressing the WT 1, PSMA and hTERT antigens, causing tumor cell lysis. hTERT, WT 1 and PSMA are upregulated in many cancer cell types.