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Belagenpumatucel-L

National Cancer Institute

Source

National Cancer Institute. *Belagenpumatucel-L*. NCI Thesaurus. Code C73438.

A transforming growth factor beta2 (TGF-beta2) antisense gene-modified allogeneic tumor cell vaccine with potential immunostimulatory and antineoplastic activities. Belagenpumatucel-L is prepared by transfecting allogeneic non-small cell lung cancer (NSCLC) cells with a plasmid containing a TGF-beta2 antisense transgene, expanding the cells, and then irradiating and freezing them. Upon administration, this agent may elicit a cytotoxic T lymphocyte (CTL) response against host NSCLC cells, resulting in decreased tumor cell proliferation; vaccine immunogenicity may be potentiated by suppression of tumor TGF-beta2 production by antisense RNA expressed by the vaccine plasmid TGF-beta2 antisense transgene. Elevated levels of TGF-beta2 are frequently linked to immunosuppression in cancer patients and may be inversely correlated with prognosis in patients with NSCLC.