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# Algenpantucel-L

National Cancer Institute

## Source

National Cancer Institute. *Algenpantucel-L*. NCI Thesaurus. Code C61082.

A cancer vaccine comprised of irradiated allogeneic pancreatic cancer cells transfected to express murine alpha-1,3-galactosyltransferase with potential antitumor activity. Vaccination is associated with the expression of murine alpha-1,3-galactosyl (alpha-gal) carbohydrate residues on cell membrane glycoproteins and glycolipids of the vaccine pancreatic cancer cell allograft; murine alpha-gal epitopes, not present on human cells, then induce a hyperacute rejection of the vaccine pancreatic cancer cell allograft. The hyperacute rejection involves the binding of pre-existing human anti-alpha-gal antibodies (which naturally occur against gut flora) to murine alpha-gal epitopes, resulting in the rapid activation of antibody-dependent cell-mediated cytotoxicity (ADCC) towards allograft cells. The host immune system then attacks endogenous pancreatic cancer cells, resulting in ADCC towards endogenous pancreatic cancer cells.