

[Open Peer Review on Qeios](#)

# Autologous GM-CSF-secreting Lethally Irradiated Leukemia Cell Vaccine

National Cancer Institute

## Source

National Cancer Institute. *Autologous GM-CSF-secreting Lethally Irradiated Leukemia Cell Vaccine*. NCI Thesaurus. Code C104419.

An autologous cancer vaccine composed of lethally irradiated leukemia cells that are genetically modified to secrete the immunostimulatory cytokine granulocyte-macrophage colony-stimulating factor (GM-CSF), with potential immunostimulating and antineoplastic activities. Upon intradermal injection, the autologous GM-CSF-secreting lethally irradiated leukemia cell vaccine secretes GM-CSF. In turn, GM-CSF may stimulate the immune system to attack tumor cells by enhancing the activation of dendritic cells (DCs) and promoting antigen presentation to both B- and T-lymphocytes. In addition, GM-CSF promotes antibody-dependent cellular cytotoxicity (ADCC), and increases interleukin-2-mediated lymphokine-activated killer cell function.