Sargramostim Plasmid DNA Sarcoma Vaccine

National Cancer Institute

Source


An autologous sarcoma cell vaccine with potential immunostimulatory activity. Tumor cells harvested from a patient with sarcoma are transfected with a plasmid DNA encoding for human sargramostim (GM-CSF) using a particle-mediated gene transfer (PMGT) technique, which avoids the use of infectious components. Vaccination with an autologous sargramostim sarcoma vaccine produces high levels of GM-CSF, a cytokine that enhances antigen presentation by activated macrophages and increases the recognition of weakly immunogenic tumors by cytotoxic T-lymphocytes.