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IL-12-expressing Mesenchymal Stem Cell Vaccine GX-051

National Cancer Institute

Source

National Cancer Institute. *IL-12-expressing Mesenchymal Stem Cell Vaccine GX-051*. NCI Thesaurus. Code C114385.

Human mesenchymal stem cells (MSCs) transduced with a retroviral vector encoding a modified form of the cytokine interleukin-12 (IL-12), with potential immunomodulating and antineoplastic activities. Upon intratumoral administration, IL-12-expressing MSC vaccine GX-051 secretes IL-12. IL-12 activates the immune system by both promoting the secretion of interferon-gamma, which activates natural killer cells (NKs), and inducing cytotoxic T-cell responses, which may result in both decreased cell proliferation and increased cell death in tumor cells.