Chimeric Costimulatory Converting Receptor-modified NK-92 Cells

National Cancer Institute

Source

National Cancer Institute. Chimeric Costimulatory Converting Receptor-modified NK-92 Cells. NCI Thesaurus. Code C162637.

A preparation of genetically-modified natural killer (NK) cells derived from the allogeneic NK-92 cell line that are transduced with an as of yet unspecified chimeric costimulatory converting receptor (CCCR) for cancer retargeting purposes, with potential cytolytic, immunomodulating and antineoplastic activities. Upon infusion of the CCCR-modified NK-92 cells, the redirected NK cells recognize and bind to tumor cells. This leads to the secretion and release of perforins, granzymes, cytokines and chemokines, which results in selective tumor cell lysis. The NK-92 cells are derived from a human cytotoxic cell line composed of allogeneic, activated, interleukin-2-(IL-2) dependent-NK cells from a 50-year old male patient with rapidly progressive non-Hodgkin's lymphoma. As NK-92 cells are devoid of killer inhibitory receptors (KIRs; also called killer cell immunoglobulin-like receptors), which are negative regulators of NK cell activity, cancer cells are unable to suppress the cancer cell killing ability of the NK-92 cells.