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Autologous Mesothelin-specific Human mRNA CAR-transfected PBMCs MCY-M11

National Cancer Institute

Source

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Autologous peripheral blood mononuclear cells (PBMCs) transfected with anti-mesothelin chimeric antigen receptor (CAR) mRNA, with potential antineoplastic activity. Upon intraperitoneal (IP) administration, the autologous mesothelin-specific human mRNA CAR-transfected PBMCs MCY-M11 recognize, bind to, phagocytose and directly kill cancer cells expressing mesothelin. In addition, MCY-M11 stimulates the immune system to induce a cytotoxic T-lymphocyte response against the mesothelin-expressing cancer cells. Mesothelin, a cell surface glycoprotein involved in cell adhesion, is overexpressed in many epithelial-derived cancers.