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Autologous mRNA-modified Anti-cMET CAR-T Cells

National Cancer Institute

Source

National Cancer Institute. *Autologous mRNA-modified Anti-cMET CAR-T Cells*. NCI Thesaurus. Code C148164.

A preparation of autologous, genetically-engineered T-lymphocytes that have been electroporated with an mRNA encoding a chimeric antigen receptor (CAR) consisting of an anti-human hepatocyte growth factor receptor (HGFR or cMET) single chain variable fragment (scFv), with potential antineoplastic activities. Upon administration, autologous mRNA-modified anti-cMET CAR-T cells direct T-cells to cMET-expressing tumor cells, which induces selective toxicity against cMET-expressing tumor cells and causes tumor cell lysis. cMET, a receptor tyrosine kinase overexpressed or mutated in many tumor cell types, plays a key role in cancer cell growth, survival, angiogenesis, invasion, and metastasis.