Driving anti-tumor activity in solid tumors with controlled arming of allogeneic CAR-NK

**Arming CAR-NK cells for potential treatment of solid tumors**

**MULTI ARMING OF CAR-NK CELLS DESIGNED TO ATTACK CANCER IN MULTIPLE COMPLEMENTARY MECHANISMS FOR IMPROVED ACTIVITY IN SOLID TUMOR MICROENVIRONMENT (TME)**

**Important to increasing the therapeutic success of CAR**

**Regulator**

**Sensor**

Weaker Greater activation of other challenges including the presence of a highly suppressive tumor immune microenvironment. Arming CAR-TUMOR CELL-NK cells for potential treatment of solid tumors

**ANTIGEN**

more potent products for the treatment of solid tumors.

**Cytokine is concentrated on the**

**NK cell functions**

Driving anti**crIL-regulation,** enhancing

**MULTI**

**CAR**

**ARMED**

**CAR**

**NK**

**Cell**

**21**

**4**

**7**

**1**

%Live Cells

favor expansion and survival of CAR

%Live Cells

Superior Anti

100 assays (three rounds of killing).

Different versions of crIL-15 enable different levels of cytokine in the surface or soluble.

Cytokine production upon stimulation with target cells

The combination of IL-15 + IL-21 resulted in a significant increase in the killing activity of CAR-NK cells in the absence of target cells (up to 50% in culture).

**Summary and next steps**

Broad applicability of Multi-Arming and tunable cytokine release technology to potentiate the function of allogeneic CAR-NK cells and maximize autocrine and paracrine benefits of cytokines with the aim of increasing the therapeutic window of CAR-NK cells for the treatment of solid tumors, increasing NK cell activity and persistence as well as recruiting and activating the local immune TME.

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