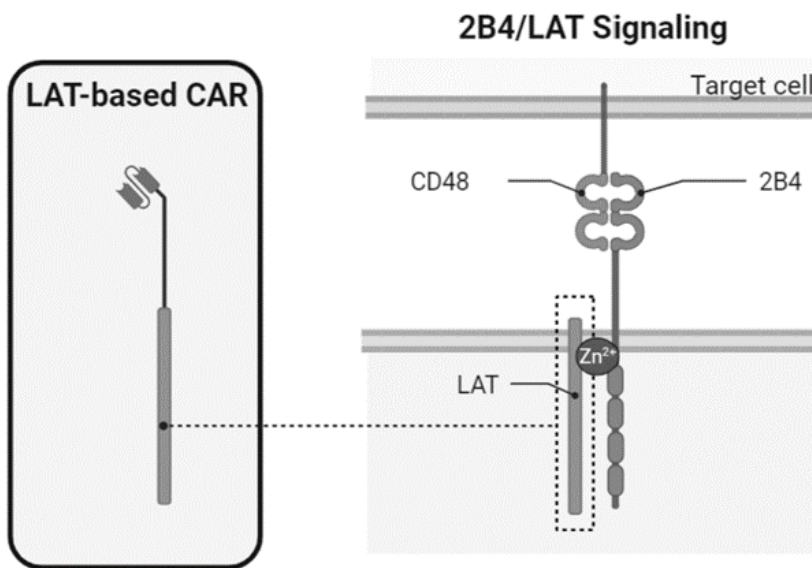


LAT-based NK CARs and their use



Ref. Nr

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Keywords

Chimeric Antigen Receptor (CAR)
Natural Killer cells (NK)
Linker for activation of T cells (LAT)
Immunotherapy
Cardiac fibrosis

Intellectual Property

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Description

The genetic engineering of immune cells with Chimeric Antigen Receptors (CARs) have revolutionized cancer treatment. The applications of this therapies to other diseases is currently being explored, and has shown promising results.

Here a novel activating domain that differs from CD3z was made. The activating domain is derived from the linker for activation of T cells (LAT). The activating domain shows great efficacy not only in T cells but especially in natural killer (NK) cells. LAT enables CAR T cells and CAR NK cells to be more effective in the long term.

Development status

Preclinical

Advantages

CAR design with superior efficacy in vitro and in vivo in NK cells.

Applications

Treatment of haematological malignancies, increased efficiency of CAR therapy against solid tumours. Use in immune cells such as T cells, NK cells, macrophages or regulatory T cells.

Treatment of auto-immune disease, infectious diseases or fibrosis, including cardiac fibrosis.

Seeking for seed investment