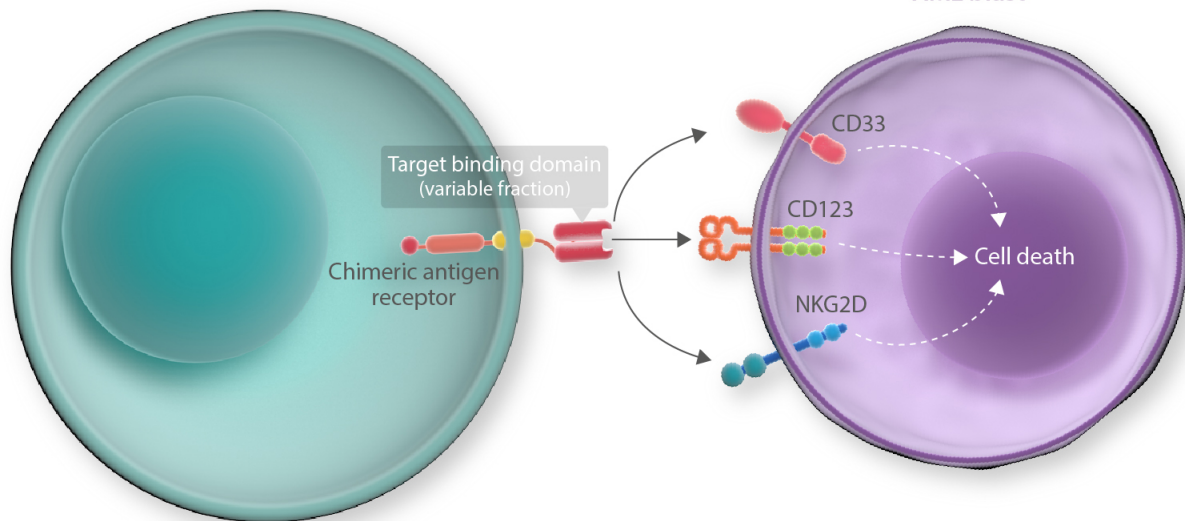


Potential targets for CAR-T therapy in acute myeloid leukemia (AML)

Chimeric antigen receptor (CAR) T cell

AML blast



Advantages

- CD33**
 - Ubiquitous on AML blasts
- CD123**
 - Ubiquitous on AML blasts
- NKG2D ligand**
 - Expressed on malignant cells
 - Role in stimulating anti-tumor immunity
 - Limited expression on healthy tissues

Disadvantages

- Present on normal HSPC → hematopoietic toxicity
- Limited published data
- Present on normal HSPC → hematopoietic toxicity
- Require a rescue allogeneic stem cell transplant (alloHSCT)
- Present on the endothelium of small-calibre blood vessels → vascular leak
- Many different types of cellular stress can upregulate NKG2D ligands on normal tissues → reduced specificity of NKG2D-CARs for malignant tissues