IL-21 on/off switch-armored solid tumor-targeting TET KO CAR-T cell therapy

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ONCOLOGY	Hit
Product Type	Cell & Gene Therapy
Indication	Patients with solid tumors expressing cancer antigens such as EGFRvIII or Her2 who have failed standard therapy
Target	Solid tumors
MoA(Mechanism of Action)	The knockout of the TET2 gene results in a CAR-T cell therapy that exhibits a stem-like memory T cell phenotype, thereby increasing its cancer-fighting endurance. Additionally, the ability to regulate the additional secretion of the IL-21 cytokine allows for the reprogramming of immune cells surrounding the tumor tissue.
Competitiveness	The ability to regulate IL-21 secretion enables control over clinical toxicity and allows for the secretion of the IL-21 cytokine exclusively within the tumor tissue. This, in turn, can restore the function of immune cells that have been compromised within the tumor, while also enhancing the intrinsic capabilities of the CAR-T cells themselves.
Development Stage	Hit
Route of Administration	IV Injection

