Enhanced Anti-PD-L1 Immunotherapy

Therapeutics

Reference Number: **2059** \ Principal Investigator: **Dr. Rony Dahan** \ Patent : **2023-0063965-A1**

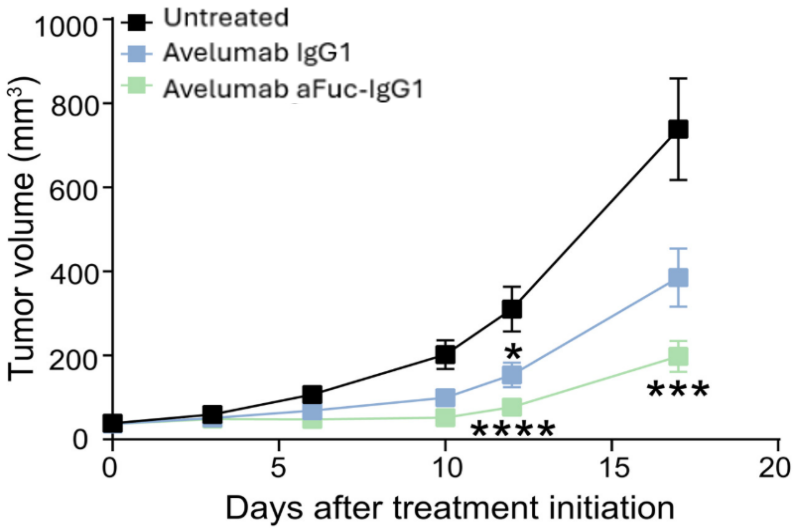
A novel approach for enhancing the efficacy of PD-L1 targeting antibodies by harnessing beneficial FcγR signaling pathways.

Strategy involves either

(1) Co-administration of PD-L1 targeting antibodies with an FcγRIIB-blocking antibody or

(2) Glycoengineering the Fc region of PD-L1 targeting antibodies, such as Avelumab, to increase their affinity for activating Fcγ receptors

This approach significantly improves immune activation and tumor response to treatment.



Fc glycoengineered PD-L1 antibody is showing improved anti-tumor activity in mice bearing MC38 colorectal tumors.

APPLICATIONS

- Enhanced anti-PD-L1 therapy for cancer treatment
- Potential applications in autoimmune and inflammatory diseases

DEVELOPMENT STAGE

Validated in preclinical models, including mice with MC38 colorectal tumors and mice with B16-F10 melanoma

Fully humane Ab available for clinical evaluation

DIFFERENTIATION

Glycoengineering of PDL-1 antibody to harness beneficial FcγR pathways

Improved immune system activation for better and persistent tumor clearance

REFERENCES

Cohen Saban et al. Sci. Immunol. (2023).