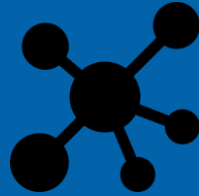


2-D-gal targets terminal fucosylation to inhibit T cell response in a mouse skin transplant model

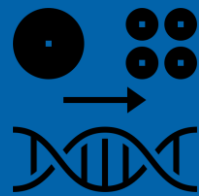
【 Background 】

- Organ allograft rejection is mainly driven by T cell response.
- Fucosylation plays essential roles in the immune cell development and function.
- 2-deoxy-D-galactose (2-D-gal) has been reported to suppress immunoresponse of macrophages.

【 Methods 】



Terminal fucosylation level in T cells was detected



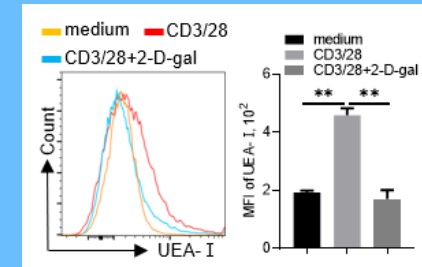
The consequences of 2-D-gal on murine T-cell immune response were investigated in vitro.



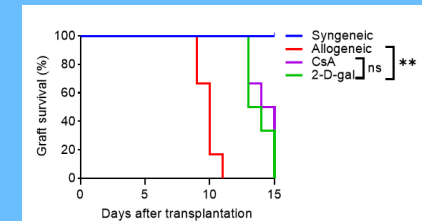
Mouse skin transplant model was utilized to evaluate the regulatory effects of 2-D-gal on T cell response in vivo.

【 Results 】

$\alpha(1,2)$ -fucosylation level was upregulated in CD3/CD28-activated T cells



2-D-gal limited T cell proliferation to prolong skin allograft in mice



Mao et al. Transplantation.2022.

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