94. Galectin-9 targeting mAb for solid tumours

(QIMR)

Asset Overview

Product Type	Antibody
Disease Area	Oncology
Indication	Solid tumors
Current Stage	Lead Optimization
Target	Galectin-9
MoA	To decreases the secretion and production of proinflammatory cytokines, increases the secretion and production of anti-inflammatory cytokines, and decreases surface expression of stimulatory molecules
Brief Description	• Immune therapy has great potential for the treatment of autoimmune disease. Galectin-9 (GAL9) is an S-type lectin beta-galacto side-binding protein with N- and C- terminal carbohydrate-binding domains connected by a linker peptide. GAL9 has been implicated in modulating cell-cell and cell-matrix interactions. GAL9 has been shown to bind soluble PD-L2, and at least some of the immunological effects of PD-L2 have been suggested to be mediated through binding of multimeric PD-L2 to GAL9, rather than through PD-1. However, mechanisms by which GAL9 and PD-L2 impact immune effector function are not yet fully characterized. • Galectin-9 (GAL9) modulates anti-tumour immune cell activity via enhancing co-stimulatory signaling. Galectin-9 is overexpressed in the TME of solid tumours and associated with improved survival in some indications. Developing mAbs to enhance Galectin-9 mediated co-localization of co-stimulatory molecules.
Intellectual Property	WO2020237320A1
Publication	-
Inventors	Michelle Wykes, Dileep K. Pulukkunat

Highlights

- Identified GAL9 mAbs that outperform anti-PD1 at enhancing antigen-specific human immune cell activation
- GAL9 mAbs increase co-stimulatory expression on human CD8+ T-cells in an antigen-dependent manner
- GAL9 mAb has single agent activity and increases CD8+ T-cells in CT26 tumours in vivo
- GAL9 mAb has single agent activity and outcompetes anti-PD1 in orthotopic 4T1 tumours

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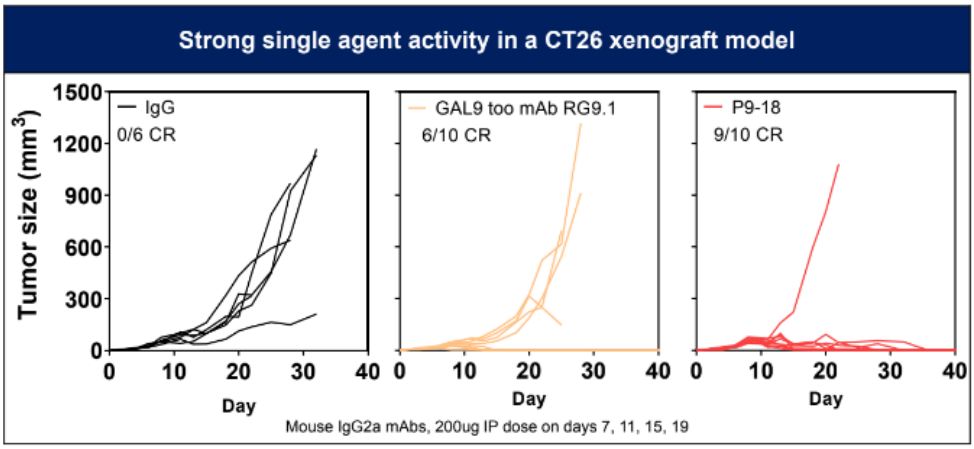
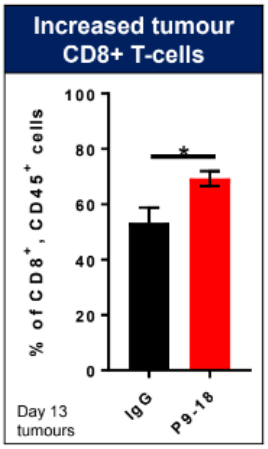
Key Data

GAL9 mAb has single agent activity and increases CD8+ T-cells in CT26 tumours in vivo





GAL9 mAb has single agent activity and outcompetes anti-PD1 in orthotopic 4T1 tumours