Galectin-3 synergizes with CD47 to Suppress Phagocytosis and T cell immunity in Peritoneal Metastases of Gastric Adenocarcinoma

A. Bulk RNA-seq analysis on Peritoneal metastasis (PC) specimen using a curated panel of immune checkpoint and "don’t eat me" gene. B. Bulk RNA-seq analysis on Stage IV of TCGA STAD (n=41) cohort using a notable panel of immune checkpoint and "don’t eat me" gene. C. Expression profile of "don’t eat me" genes CD47, SIRPA, CD274, PDCD1, LILRB1 and LILRB2 were shown in dot-plot with normalized expression levels of indicated genes from scRNAseq data (n=20). D. CD47 and PD-L1 were detected on 6 representative PC ascites samples, as examined by CyTOF using antibodies against notable cell type markers, and CD47 and PD-L1. E. CD47 expression (right) on EpCAM+ tumor cells detected on PC samples between long-term survivor (>12 month) and short-term survivor (<12 month) (n=42), as assessed by flow cytometry. F. Normalized expression levels of CD47 and SIRPA in tumor cluster and myeloid cluster between long-term survivors and short-term survivors was shown as violin plots. G. The overall survival of CD47 in complete responders (CR) GAC patients from TCGA dataset.
Galectin-3 synergizes with CD47 to Suppress Phagocytosis and T cell immunity in Peritoneal Metastases of Gastric Adenocarcinoma

A. Correlation between LGALS3 and CD47 in short-term survivor tumor clusters from scRNA-seq data.

B. Gal-3 and CD47 staining on PC samples (n=51).

C. Representative immunohistology staining of Gal-3 and CD47 images in TMA samples (n=210).
Galectin-3 synergizes with CD47 to Suppress Phagocytosis and T cell immunity in Peritoneal Metastases of Gastric Adenocarcinoma

A. Representative bioluminescence images over 22 days (left) and quantification (right) of engrafted with KP-Luc2 cell in C57BL/6 mice (n = 5 mice per group) in the indicated treatment. B. Representative contour plots and quantification of phagocytosis at the endpoint day 22, as examined by flow cytometry. C. Schematic illustration of the impact of Gal-3 and CD47 in phagocytosis and immune regulation in GAC in TME