UNIVERSITÄTSMEDIZIN GÖTTINGEN UMG

Lab2Date Mitteilungen des Interdisziplinären UMG-Labors

New publication in Hepatology

Our group discovered that the seceted protein Semaphorin-3C promotes liver fibrosis. Chronic liver disease often leads to fibrosis and chirrosis. Analysis of large data from patients suffering from chronic liver disease revealed that Semaphorin-3C is enriched in those undergoing liver fibrosis. Through Semaphorin-3C gene manipulation in hepatic stellate cells we could show that this protein exacerbates TGF-beta signaling through its receptors Neuropilin-2. By gene knockout studies we demonstrated that targeting the Semaphorin-3c / Neuropilin-2 signaling axis we can reduce liver fibrosis in preclinical model systems.

More:

Wiedmann L, De Angelis Rigotti F, Vaquero-Siguero N, Donato E, Espinet E, Moll I, Alsina-Sanchis E, Bohnenberger H, Fernandez-Florido E, Mülfarth R, Vacca M, Gerwing J, Conradi LC, Ströbel P, Trumpp A, Mogler C, Fischer A, Rodriguez-Vita J. HAPLN1 potentiates peritoneal metastasis in pancreatic cancer. Nat Commun. 2023 Apr 24;14(1):2353. doi: 10.1038/s41467-023-38064-w. PMID: 37095087; PMCID: PMC10126109.