Hepatic immune cell profiling of the GAN diet-induced obese and biopsyconfirmed mouse model of NASH with advanced fibrosis and HCC

Authors

Malte Hasle Nielsen¹, Michael Feigh¹, Jacob Nøhr-Meldgaard¹, Anja Mosekjær Bengtsson¹, Henrik H. Hansen

¹Gubra, Hørsholm Kongevej 11B, Hørsholm, Denmark

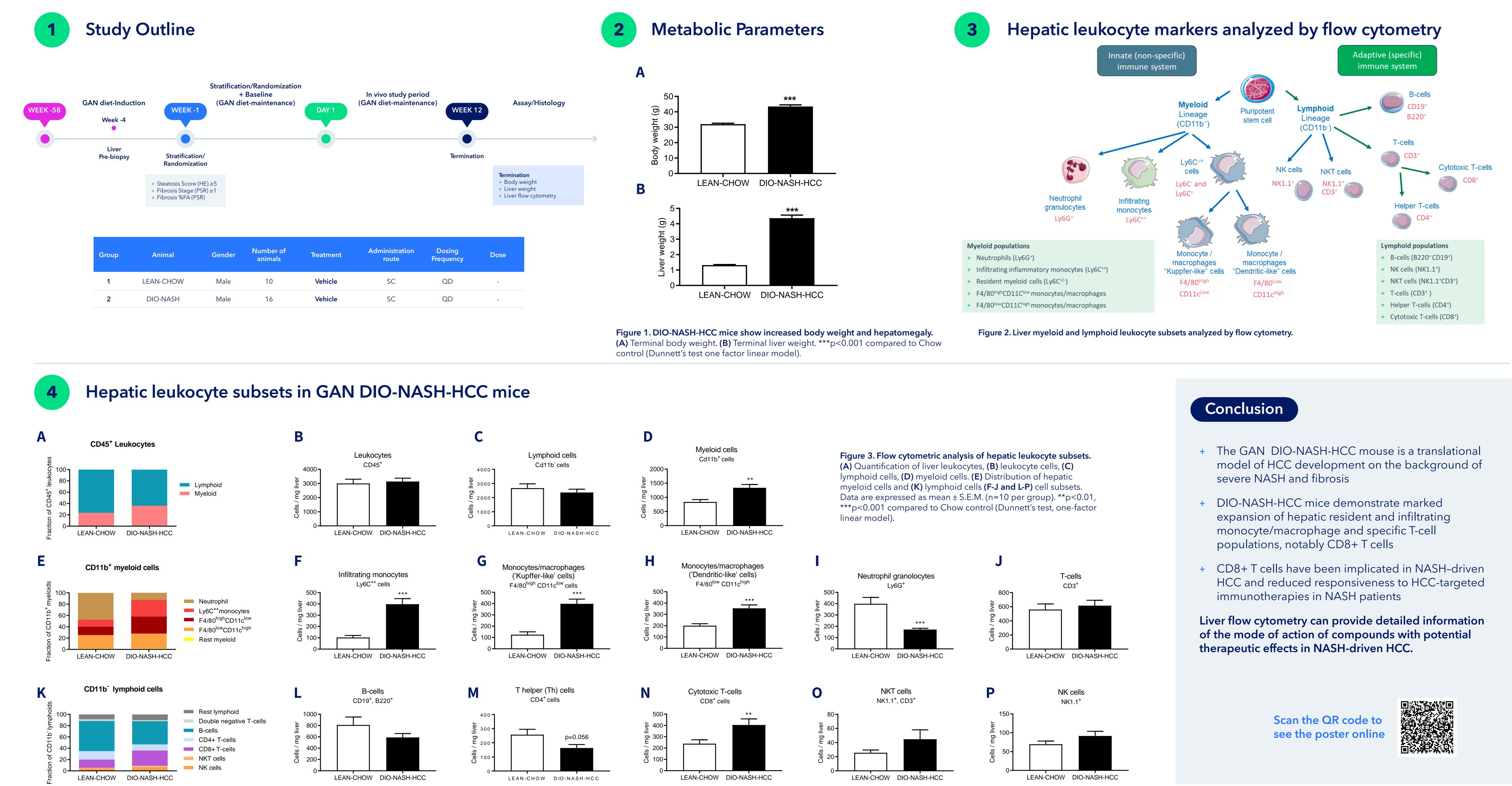
Corresponding author Michael Feigh - mfe@gubra.dk

Background & Aim

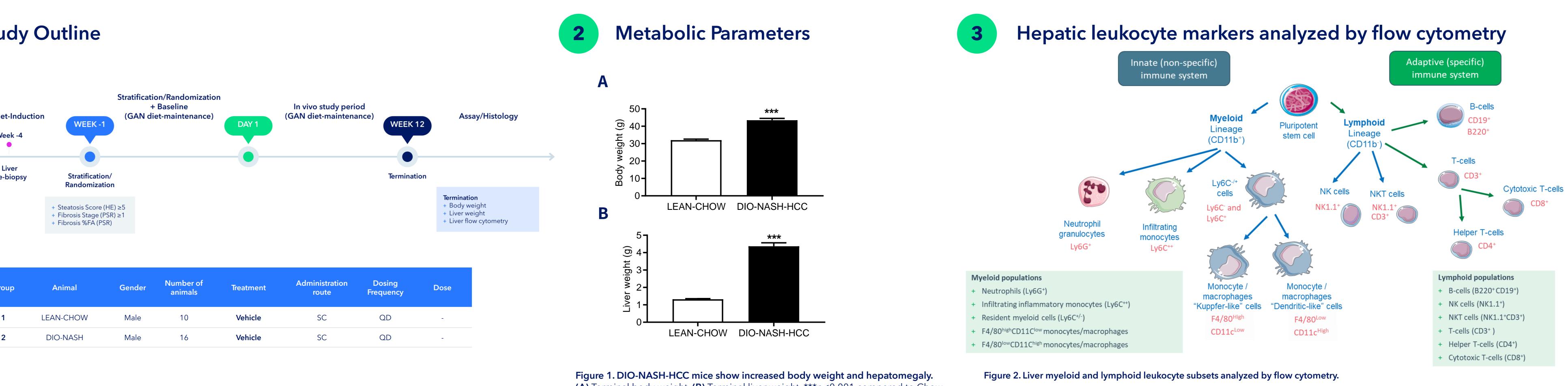
Non-alcoholic steatohepatitis (NASH) has become an emerging risk factor for the development of liver fibrosis and hepatocellular carcinoma (HCC). Recent data suggest that NASH-HCC patients are less responsive to HCC-targeted immunotherapies, likely owing to NASH-related aberrant immune cell regulation. To gain further insight into immune cell regulations in NASHdriven HCC, we profiled liver leukocyte populations in the translational Gubra Amylin NASH (GAN) diet-induced obese (DIO) and biopsy-confirmed mouse model of advanced fibrosing NASH and HCC.

Methods

C57BL/6JRj male mice were fed the GAN diet or chow diet for 58 weeks before randomization. Prior to randomization all animals underwent liver biopsy for histological confirmation (fibrosis stage 3, steatosis score 3, inflammation score ≥ 2) using the non-alcoholic fatty liver disease activity scoring (NAS) and fibrosis staging system. Animals were terminated at 70 weeks on diet. Liver samples were stained with two panels of fluorescently labelled antibodies to detect and quantify leukocyte subsets, including monocytes/macrophages, neutrophils, T-cells, Bcells, Natural killer (NK) and NK T-cells and analysed by flow cytometry.



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1 LEAN-CHOW Male 10 Vehicle SC QD - 2 DIO-NASH Male 16 Vehicle SC QD -	Group	Animal	Gender	Number of animals	Treatment	Administration route	Dosing Frequency	Dose
2 DIO-NASH Male 16 Vehicle SC QD -	1	LEAN-CHOW	Male	10	Vehicle	SC	QD	-
	2	DIO-NASH	Male	16	Vehicle	SC	QD	-

