Physiogenex
THE METABOLIC DISEASES EXPERTS

Free choice diet-induced obese NASH hamster: the only NASH model with heart failure and preserved ejection fraction

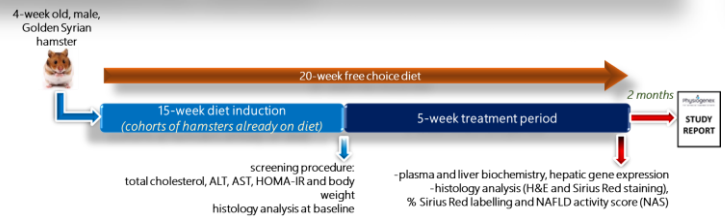
✓ Benefit from our unique preclinical model to demonstrate that your drug improves NASH as well as HFpEF, the first cause of comorbidity in NASH patients.

Key benefits

✓ *Conversely to mice and rats, the hamster has a metabolism of cholesterol and bile acids similar to humans. Importantly, our unique NASH model rapidly develops hepatocyte ballooning, portal to bridging fibrosis, and heart failure with preserved ejection fraction (HFpEF).*

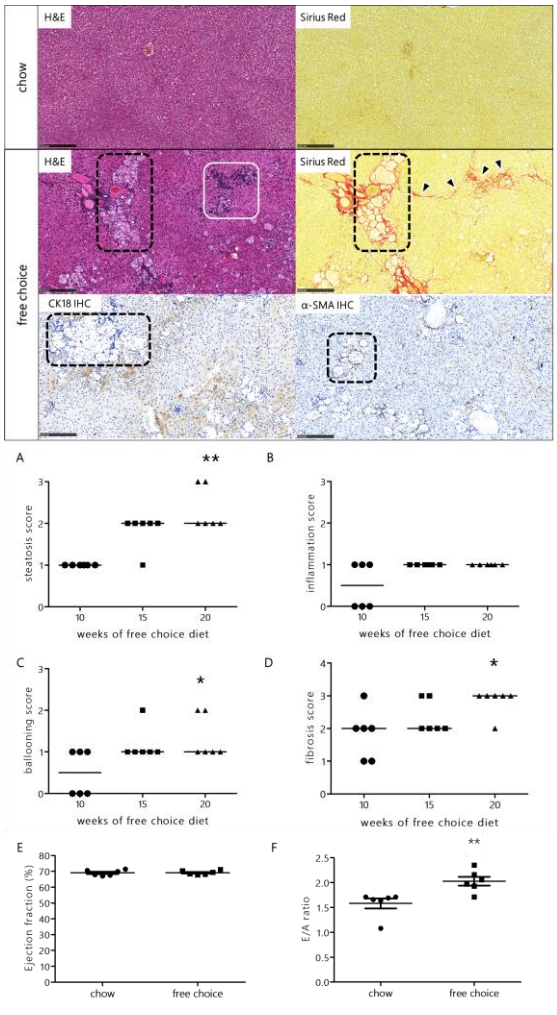
✓ *Evaluate your drug compound on both NASH and HFpEF, the first cause of comorbidities in NASH patients.*

EXPERIMENTAL DESIGN



MODEL CHARACTERISTICS

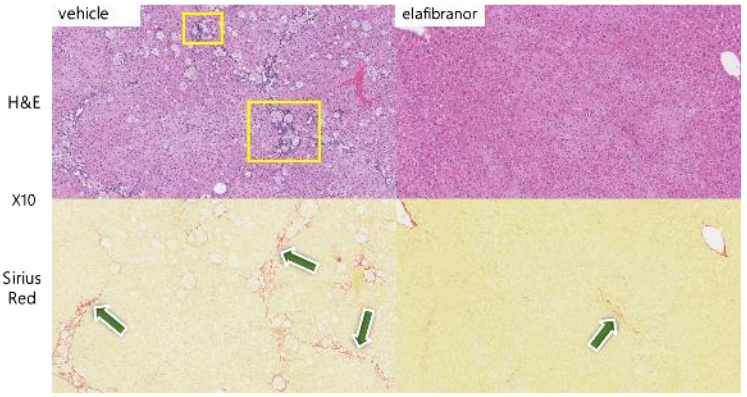
FREE CHOICE DIET INDUCES STEATOSIS, INFLAMMATION, HEPATOCYTE BALLOONING, FIBROSIS AND HFpEF



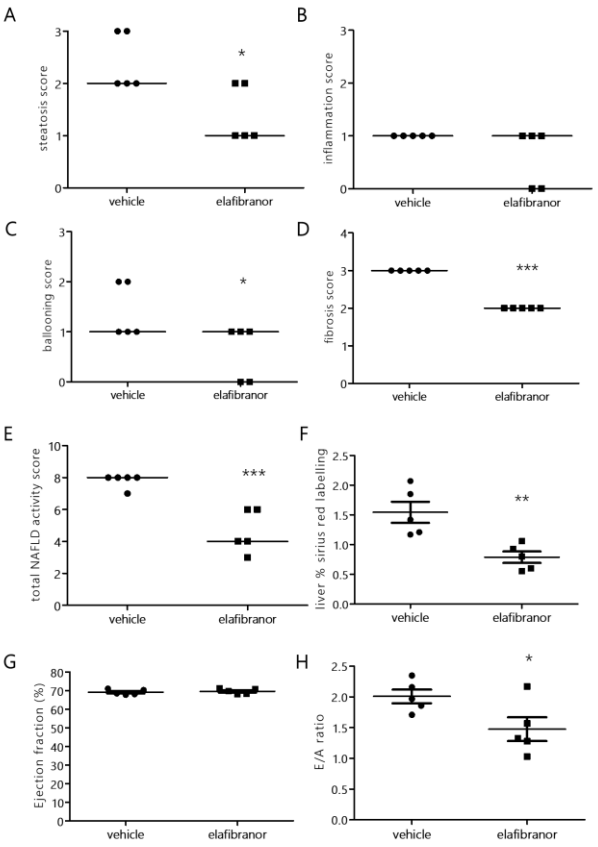
Representative liver Hematoxylin & Eosin (H&E) and Sirius Red staining, cytokeratin-18 (CK18) and α-smooth actin (α-SMA) immunostaining (upper panel). Steatosis (A), inflammation (B), ballooning (C) and fibrosis (D) scores from 10 to 20 weeks of free choice diet. Ejection fraction (E) and E/A ratio (F) measured by echocardiography in chow or free choice fed hamsters for 20 weeks. *p<0.05 and **p<0.01.

CURATIVE EFFECTS OF ELAFIBRANOR

A 5-WEEK TREATMENT WITH ELAFIBRANOR IMPROVES NASH/FIBROSIS AND HFpEF



Representative liver Hematoxylin & Eosin (H&E) and Sirius Red staining at 10x magnification in hamsters treated p.o. QD for 5 weeks with vehicle or elafibranor 15mg/kg. Yellow squares indicate steatosis, inflammation and hepatocyte ballooning, green arrows indicate portal (stage 2) to bridging (stage 3) fibrosis.



Steatosis (A), inflammation (B), hepatocyte ballooning (C), fibrosis (D) and total scores (E), liver % Sirius Red labelling (F), ejection fraction (G) and E/A ratio (H) in hamsters treated with vehicle or elafibranor for 5 weeks. **p< 0.05, **p< 0.01 and ***p< 0.001 vs. vehicle.*

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