

# Curative effects of elafibranor in the Diet-Induced NASH (DIN) hamster model

✓ Compare your drug versus a major benchmark in our Diet-Induced NASH hamster: unique preclinical model showing similar cholesterol/bile acids metabolism and NASH versus humans

## Key benefits

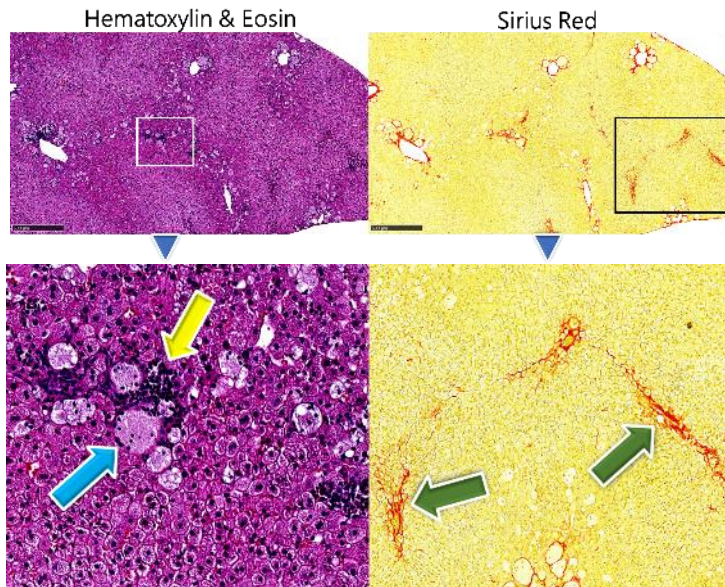
- ✓ Conversely to mice and rats, the DIN hamster has a metabolism of cholesterol and bile acids similar to humans. Importantly, this unique NASH model rapidly develops hepatocyte ballooning and portal to bridging fibrosis under hyperenergy overfeeding, which is more difficult to obtain with mouse and rat NASH models.
- ✓ Evaluate your drug compound on NASH in comparison with elafibranor, a major benchmark currently evaluated in clinical trial.

## EXPERIMENTAL DESIGN

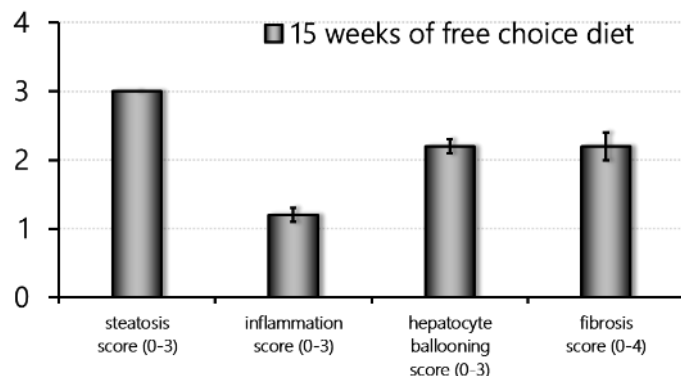
- **Background strain:** Golden Syrian hamster, male
- **Diet:** free-choice diet (normal chow or high fat/cholesterol diet and normal water or 10% fructose water) to favor hyperphagia/high energy intake
- **In life study duration:** 20 weeks (15-week diet period and 5-week treatment period)

## MODEL CHARACTERISTICS

### A 15-WEEK FREE-CHOICE DIET INDUCES STEATOSIS, INFLAMMATION, HEPATOCYTE BALLOONING AND FIBROSIS



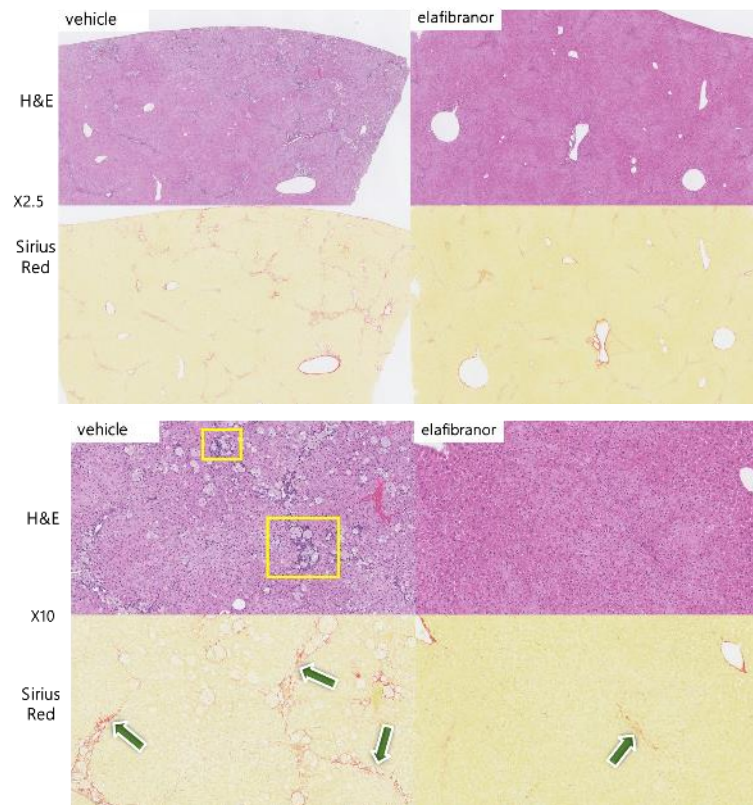
Representative liver Hematoxylin & Eosin and Sirius Red staining at x5 (upper line) and x20 magnification (lower line) in hamsters fed a free-choice diet for 15 weeks. Yellow arrow indicates inflammatory cells infiltrate, blue arrows hepatocyte ballooning, green arrows portal fibrosis (stage 2).



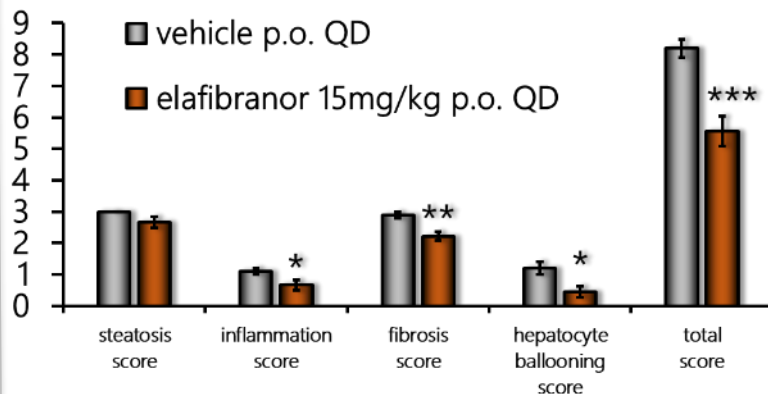
Steatosis, inflammation, hepatocyte ballooning and fibrosis scores in hamsters fed for 15 weeks the free-choice diet (n=5).

## CURATIVE EFFECTS OF ELAFIBRANOR

### A 5-WEEK TREATMENT WITH ELAFIBRANOR IMPROVES NASH SIGNIFICANTLY



Representative liver Hematoxylin & Eosin (H&E) and Sirius Red staining at x2,5 (upper line) and 10x magnification (lower line) 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, inflammation, hepatocyte ballooning, fibrosis and total scores in hamsters treated with vehicle or elafibranor (n=10/group) for 5 weeks. \*p<0.05, \*\*p<0.01 and \*\*\*p<0.001 vs. vehicle.