The Diet-Induced NASH/fibrosis obese mouse

Key benefits
✓ Get a complete evaluation (biochemistry, histology and NAScore) of your compounds targeting NASH in the context of obesity and insulin resistance
✓ 6 weeks treatment to evaluate the impact of your drug vs. benchmarks
We provide mice cohorts already on diet – our nutritional approach ensures a robust induction of obesity, NASH and portal (score 2) fibrosis and avoid the need for liver biopsies to select animals with the right phenotype

ANIMAL MODEL

- Background strain: C57BL/6J mouse
- Our original diet-induced NASH: 60% high fat diet supplemented with cholesterol + 10% fructose in drinking water
- Study duration: 6 weeks
- Reference compounds: elafibranor, obeticholic acid, semaglutide

8-week old male, C57BL/6J mice

>25-week diet induction (mice already on diet)  6-week treatment

screening procedure: plasma ALT/AST, HOMA-IR, body weight, histology analysis and NAFLD activity scoring at baseline:
- blood/organ collection
- plasma biochemistry
- hepatic gene expression
- % Sirius Red labelling and NAFLD activity score (NAS)

BASELINE CHARACTERISTICS AT TREATMENT START

H&E  Sirius Red

6-WEEK TREATMENT WITH ELAFIBRANOR IMPROVES NASH, LIVER CELL DEATH AND FIBROSIS

Representative Sirius Red pictures (upper panel), NAFLD activity score (A) liver % Sirius Red labelling (B), hepatic cleaved caspase 3 (C), a marker of apoptosis, and cleaved RIP3 (D), a marker of necroptosis, protein levels, hepatic MCP-1 (E) and alpha-SMA (F) gene expression in mice treated for 6 weeks with vehicle or elafibranor. *p<0.05, **p<0.01 and ***p<0.001 vs. vehicle.