

4-week CCl₄-induced liver fibrosis mouse model

A fast, costless mouse model, to rapidly evaluate your compounds targeting liver fibrosis

Key benefits

- Get a deep evaluation (quantification of fibrosis and NAS score) of your compounds targeting liver fibrosis within 3 months
- Only 4 weeks of carbon tetrachloride (CCl₄)-induction and 2 weeks treatment to quickly evaluate your drug vs. benchmark

PROTOCOL DESIGN

- Background strain: C57BL/6J mouse, 8-week old, male
- **CCl₄-induced liver fibrosis:** CCl₄ injected i.p. 2 times per week for 4 weeks
- In life study duration: 4 weeks
- **Positive controls**: obeticholic acid (FXR agonist) and elafibranor (PPARalpha/delta dual agonist)



MODEL CHARACTERISTICS

CCL₄ INJECTION RAPIDLY INDUCES BRIDGING FIBROSIS WITHIN 4 WEEKS



% Sirius Red steatosis inflammation fibrosis total score labelling score score score

(A) representative H&E (yellow arrows: inflammation) and Sirius Red staining (green arrows: fibrosis), (B) % Sirius Red labelling and NAS scoring in mice treated with corn oil or with CCl4 for 2 or 4 weeks. *p<0.05, **p<0.01 and ***p<0.01 vs. 4-week corn oil

EFFECTS OF POSITIVE CONTROLS

TWO-WEEK TREATMENT WITH ELAFIBRANOR BETTER REDUCES HEPATIC FIBROSIS THAN OBETICHOLIC ACID



1 0 % Sirius Red steatosis inflammation fibrosis total score score

(A) representative Sirius Red staining, (B) % Sirius Red labelling and NAS scoring in mice treated with corn oil or with CCl4 for 2 or 4 weeks. *p<0.05 and ***p<0.01 vs. 4-week corn oil

PHYSIOGENEX SAS - Prologue Biotech – 516 Rue Pierre et Marie Curie –31670 Labège Cedex – France Phone: +33 561 287 040 - business@physiogenex.com - www.physiogenex.com