Screening and efficacy tests on *in vitro* Hepa-RG® models

**Key benefits**

Get benefits from our HepaRG® *in vitro* model: quickly assess the effects of your compounds on cell viability/function, and hepatic lipid accumulation in a simple HepaRG culture system.

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**In vitro MODEL**

- **Cell line:** HepaRG® (Biopredic)
- **Healthy model:** mature HepaRG in physiological medium
- **Steatosis model:** 7-day oleic acid loaded / mature HepaRG

**Experimental design:**

- **Physiological medium (7 days)**
- **Oleic acid medium (7 days)**

**Test compounds (24h incubation)**

Less than 1 month for a study report

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**In vitro HepaRG® steatosis model**

**Oleic acid loading strongly increases intracellular lipid accumulation and reduces cell viability via lipotoxicity**

(A) Lipid accumulation (Oil Red O staining per viable cell) and (B) cell viability (LDH release). †p<0.05 vs. control medium.

**Pharmacological validation:** ACC inhibitor firsocostat markedly reduces intracellular lipid accumulation.

(A) Intracellular lipid accumulation (oil red O staining), (B) cell function (albumin secretion) and (C) cell viability (LDH release). $p<0.05$ vs. OA+DMSO

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**In vitro HepaRG® model**

**Acetaminophen (APAP) reduces cell viability and albumin secretion, while FXR agonist Obeticholic acid (OCA) is neutral**

(A) LDH release (cell viability) and (B) albumin secretion (cell function)

*P<0.05 and ‡P<0.01 vs. control medium.