SILENSOMES®

The potential for DDIs is assessed in drug development using well-established *in vitro* tools, according to Test Guidelines and required by regulatory bodies (FDA, EMA)

While these approaches provide *qualitative* information, the *quantitative* estimation of fm remains a challenge

Silensomes™ represent a new simple tool to achieve both qualitative and quantitative phenotyping information:

- ❑ **Which CYP is responsible for the metabolism of a chemical?**
- ❑ **What is the fraction metabolized by each CYP (fm)?**

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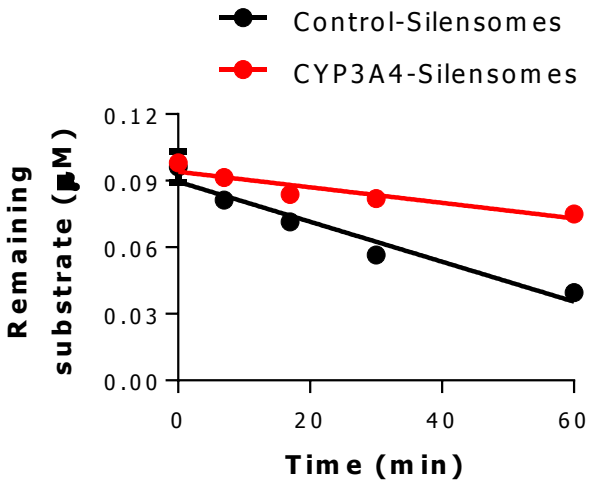
Caltag Medsystems
life science solutions

SILENSOMES®

Human pooled liver microsomes chemically and irreversibly inactivated ("silenced") for a single specific CYP using mechanism-based inhibitors



$$fm = 1 - \left(\frac{CL_{int}\ Silensomes^{TM}}{CL_{int}\ Control} \right)$$

Simple with silensomes!

Recombinant CYPs (rCYPs)

Incubate with each CYP to calculate RAF:

$$RAF = \frac{rCYP(substrate)}{HLM(substrate)}$$

↓

Incubate drug with 9 rCYPs

↓

Calculate clearance (CL_{int})

↓

Calculate fm

SILENSOMES®

Incubate drug with 9 Silensome CYPs + homologues

↓

One step for the direct calculation of *in vivo* fm

↓

Directly calculate fm

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AVAILABILITY

Caltag Medsystems Booth

9 CYPs + control microsomes on sale now!

Beta testers encouraged!
(Questionnaire + publication)

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