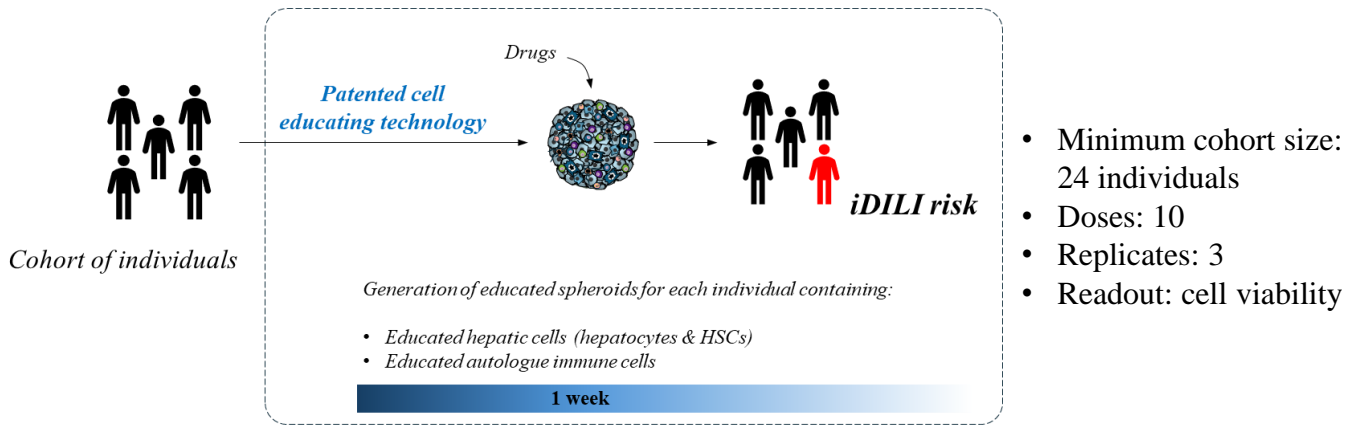
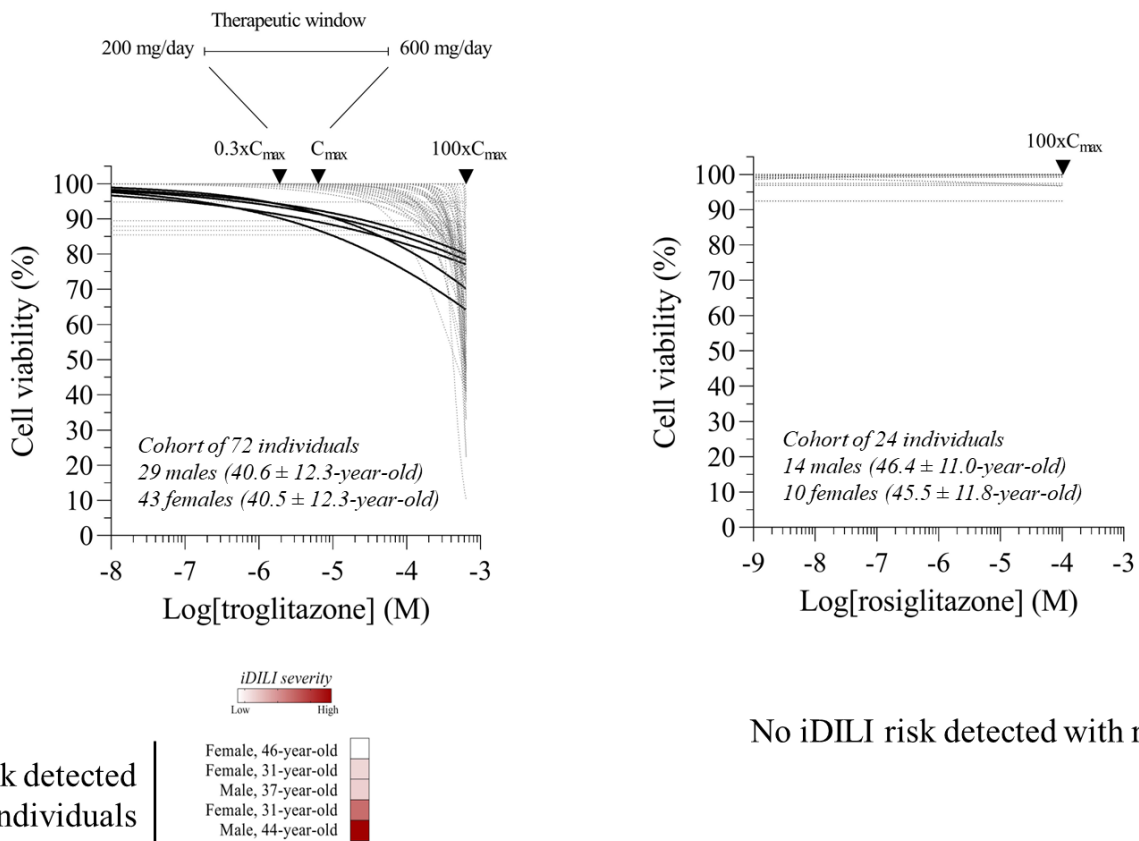


Detection of idiosyncratic drug-induced liver injury (iDILI) with the GenuineSelect-TOX system



A comparative study of troglitazone and its non-iDILI partner compound rosiglitazone to mediate iDILI



GenuineSelect-TOX is more sensitive and accurate than existing preclinical models to detect DILI risk

		Albuterol	Flavoxate	Lenvatinib	Etoposide	β -estradiol	Nizatidine	Azathioprine	Oxaliplatin	Bosentan	Stavudine	Sorafenib	Cabozantinib	
	Clinical apparent liver injury													
In vitro models	Human Liver-Chip													Ewart <i>et al.</i> 2022. Commun Med
	Human liver microtissues													Proctor <i>et al.</i> 2017. Arch Toxicol
	Microfluidic liver-on-a-chip 3D iPSC-derived hepatocytes													Bircsak <i>et al.</i> 2021. Toxicology
	3D PHH													Li <i>et al.</i> 2020. J Pharm Sci
	2D human iPSC-derived hepatocytes													Sirenko <i>et al.</i> 2014. Assay Drug Dev Technol
	GenuineSelect-TOX → Donor-dependent educated spheroids													Cherradi <i>et al.</i>, 2023. In vitro models
Animal models	Female Albino-Swiss mouse													Tritapepe <i>et al.</i> 1980. Biochem Pharmacol
	NAFLD mouse													Lu <i>et al.</i> 2019. Int J Mol Med
	Adult mongrel dog													Worth. 1968. Tox Appl Pharmacol
	Mouse, rat, dog, and monkey													Probst <i>et al.</i> 1989. Fundam Appl Toxicol
	Rat and mouse													Barreto <i>et al.</i> 2006. Eur J Obstet Gynecol Reprod Biol / Igoudjil <i>et al.</i> 2007. Antivir Ther

Legend: No DILI DILI

Benefits:

- Test for iDILI risk on a tailored cohort of individuals
- Get insights on age- and sex-associated iDILI risk
- The model could detect immune-mediated idiosyncratic DILI risk
- De-risk iDILI already at preclinical stage
- Quick toxicity screenings to identify the most toxic drugs
- Assess inter-individual differences in iDILI occurrence
- Improved preclinical selection of drug candidates for clinical development
- Reduced times and costs of drug development
- Direct translation of findings to patients



Cherradi *et al.*, 2023
In vitro models