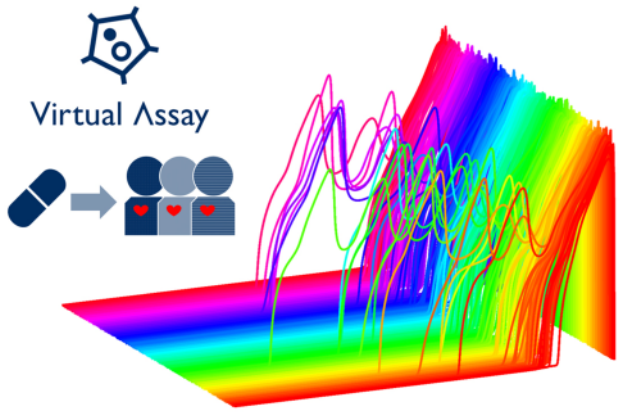
PROJECT NUMBER

23318

A framework for in silico prediction of drug safety and efficacy in populations of human cardiac cell models

Virtual Assay V4 brings electrophysiology and contractility together in a single, validated, human-based mechanistic framework — enabling early, quantitative prediction of both electrical and mechanical cardiac risk.

Applications: Drug discovery, drug development



Features	Benefits
Simultaneous prediction of proarrhythmic and inotropic risk	More informed portfolio decisions
Quantitatively validated contractility prediction (86–95% agreement benchmarks)	Smarter experimentation
Human-specific modelling eliminating species translation issues	Reduced reliance on ex vivo animal testing through human-based modelling
Mechanistic, auditable drug–channel–tension traceability	Earlier de-risking

Features	Benefits
Population-level risk stratification	

Available for

- Co-development
- Consulting
- Licensing

To find out more, contact enquiries@innovation.ox.ac.uk and quote the project number.

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