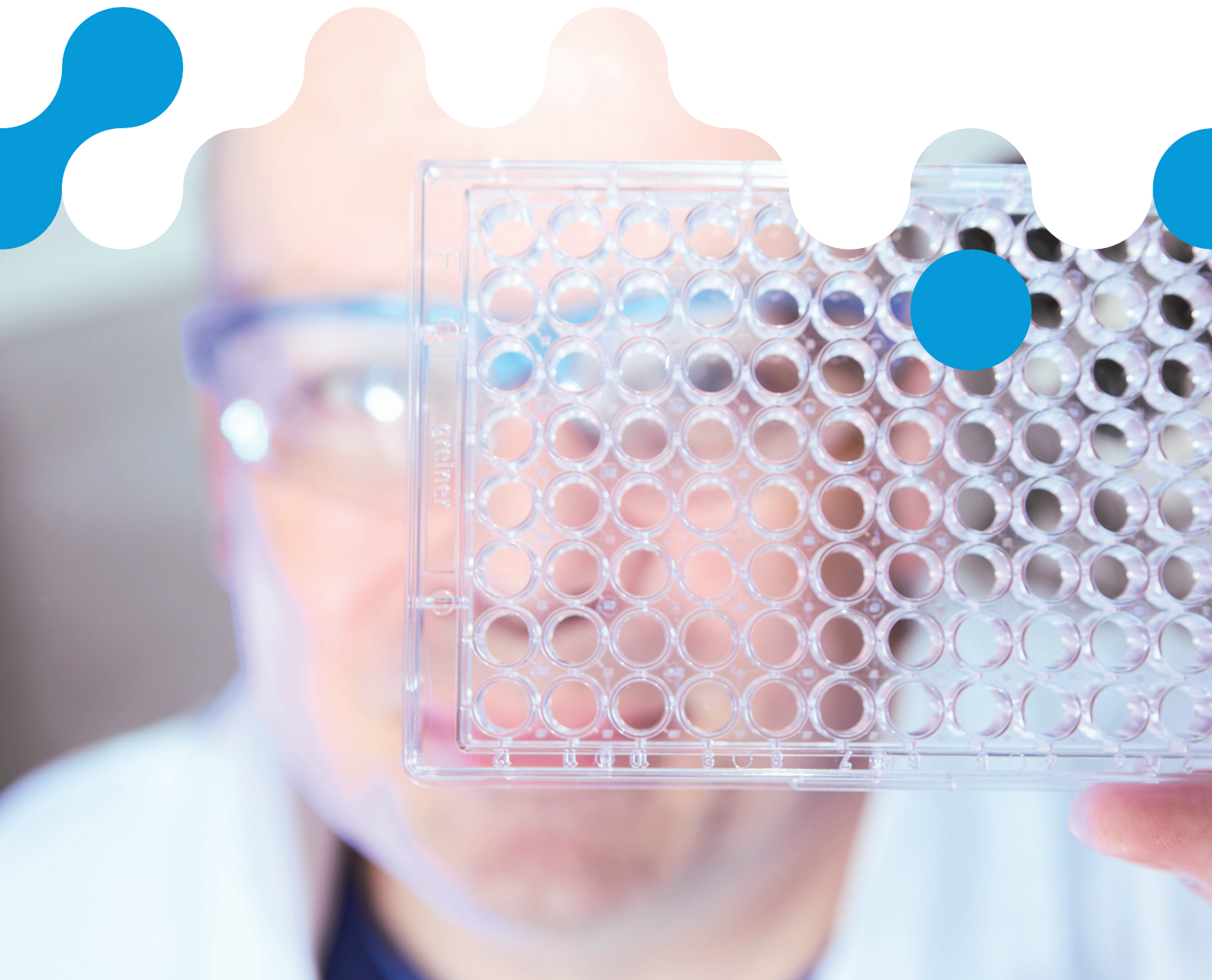


# Cardiac Models. Functional Readouts. Real Insights.

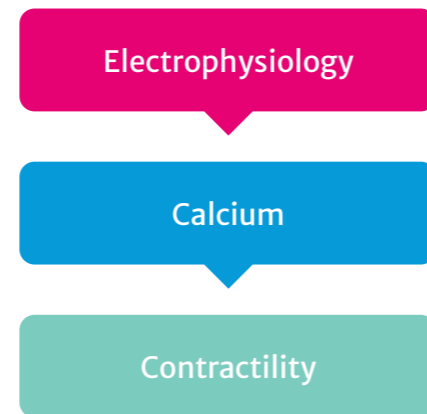
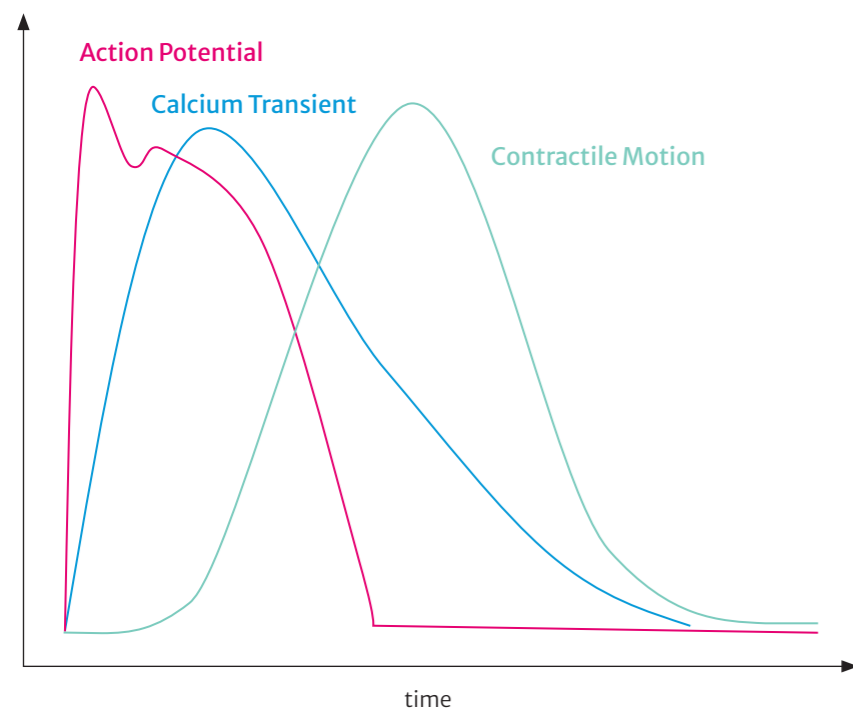
From Ion Channel Activity to  
Contractile Performance



# From Electrophysiology to Contractility – Examine the cardiac contraction cycle

Assess the full functional performance of your cardiac cell lines with integrated electrophysiological and mechanical readouts:

- + Capture the electrical and mechanical phases of the cardiac excitation – contraction cycle with Extracellular Field Potential Duration (EFPD) and Contractile Force as key readouts
- + Monitor ion channel activity, calcium handling, and force generation in a label-free, physiological environment
- + Enable comprehensive performance validation of your cardiac cell lines for drug testing, disease modeling, or assay development



## Why Partner with Us for Cardiac Cell Line Validation

### End-to-End Insight

Assess the full cardiac contraction cycle with integrated electrophysiology and contractility readouts

### Flexible by Design

Tailor assay formats, compound panels, and cell models to your specific goals

### Reliable & Fast

Count on a trusted partner committed to delivering high-quality data with speed and precision

# CiPA-compliant testing of human iPSC-derived cardiac cell lines

Choose the gold standard for validating your human iPSC-derived cardiomyocytes: CiPA reference compounds with defined low, intermediate, and high TdP risk levels. Benchmark your model's predictive power with clinically relevant compounds used in regulatory safety screening.

### Regulatory Relevance

Test with clinically validated CiPA compounds for confidence in cardiac safety predictions

### Proven Benchmarking

Validate your hiPSC-derived cardiomyocytes against gold-standard TdP risk profiles

### Fully Customizable

Tailor compound selection and assay design to meet your specific validation goals

Compound	CiPA Risk Evaluation	In-house Cell Line Response
Verapamil	low	79%
Cisapride	intermediate	86%
Diltiazem	low	93%
Nitrendipine	low	97%
Clozapine	intermediate	106%
Loratadine	low	106%
Clarithromycin	intermediate	107%
Metoprolol	low	109%
Risperidone	intermediate	111%
Tamoxifen	low	113%
Nifedipine	low	113%
Terfenadine	intermediate	116%
Ondansetron	intermediate	122%
Mexiletine	low	124%
Pimozide	intermediate	130%
Ranolazine	low	133%
Chlorpromazine	intermediate	133%
Astemizole	intermediate	139%
Dofetilide	high	165%
Ibutilide	high	166%
Droperidol	intermediate	173%
Vandetanib	high	176%
Azimilide	high	176%
Domperidone	intermediate	182%
Disopyramide	high	217%
Quinidine	high	249%
Sotalol	high	275%
Bepidil	high	344%

“Developing our own cell line was a major milestone, but validating its functional performance required the right partner – and that’s exactly what we found with innoVITRO. From baseline contractility to testing with tool and cardiotoxic compounds, their team provided scientific rigor and outstanding support.

The final CiPA compound testing gave us the confidence to move forward. We felt both supported and strategically guided toward a successful market launch.”

**Amit Khanna**

Head of Integrated Drug Discovery & Development  
Yashraj Biotechnology Ltd.



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