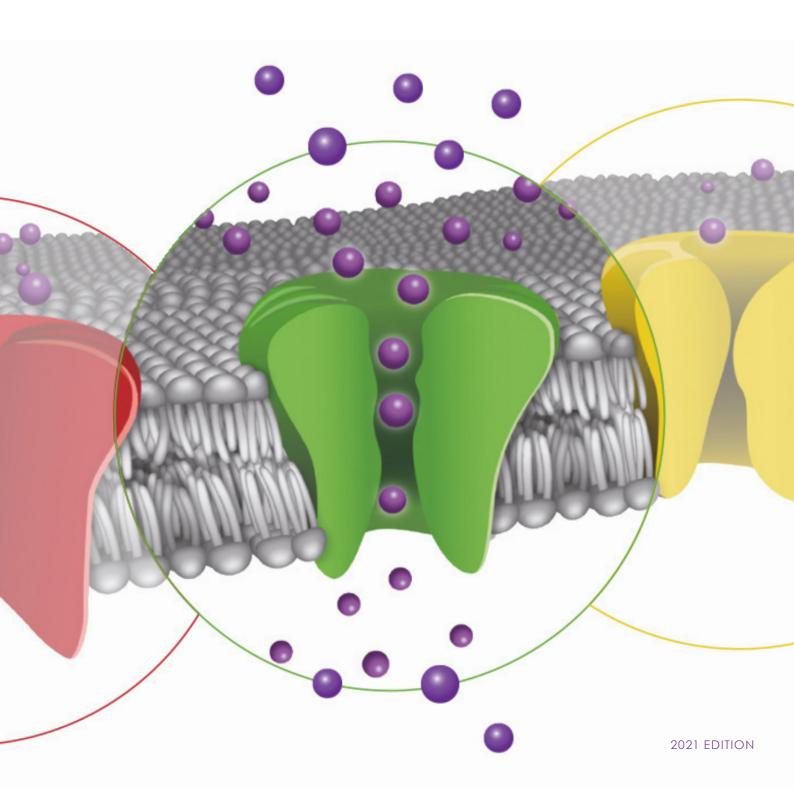


METRION BIOSCIENCES

# Integrated Drug Discovery Brochure





# Welcome.

Welcome to Metrion Biosciences, leaders in ion channel drug discovery.

Metrion Biosciences is a preclinical ion channel contract research organisation formed in September 2015.

The Metrion team has substantial experience of providing high quality drug discovery services for ion channel targets to clients on a fee-for-service or collaboration basis.

Metrion is a leading provider of safety pharmacology services including cardiac safety profiling and neurotoxicology testing, as well as offering cardiac and neuronal translational assays using native cells and iPSC models. Our state of the art laboratory facility is located at Granta Park, the largest research park in Cambridge (UK), and the Metrion team takes pride in providing a knowledgeable, collaborative and flexible service to our clients.





#### Our Services



### Ion channel screening.





## Cardiac ion channel screening.

Metrion offers screening services against a premium panel of validated Comprehensive In Vitro Proarrhythmia Assay (CiPA) compliant human cardiac ion channel screening assays.



### Neuroscience ion channel screening.

Metrion offers a range of neuroscience related ion channel screening assays and platforms, including native tissue and species selectivity testing.



#### Translational Assays.

Metrion are developing phenotypic assays to aid the translation of in vitro cardiac safety and neuroscience data to the pre-clinical stage.



#### Integrated drug discovery.

Our highly experienced interdisciplinary team provides clients with a fully integrated drug discovery service by bringing together experts in ion channel biology, medicinal chemistry, specialist chemistry, translational biology, ADMET & DMPK.

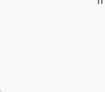








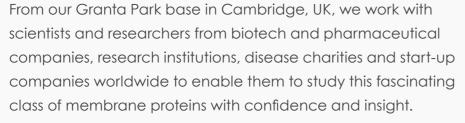
#### What we do



Metrion staff offer proven ion channel electrophysiology expertise and reliable assays for our clients. Our services include:

- High quality, cost-effective compound screening assays
- Detailed characterisation of lead compounds in human cells and native tissue
- Confirmation of efficacy in stem cell and other phenotypic models
- Rapid reporting and data interpretation by our experienced ion channel team
- A dedicated, flexible service tailored to your requirements

#### Who we work with





We currently work with clients located in over 20 countries across five continents, many of whom are looking to validate, develop or de-risk ion channel modulators as they progress towards a nomination for clinical development.

# Why choose Metrion?



- Highly experienced and diligent team with over 100 years combined knowledge of automated patch clamp (APC) and experience within academia, the pharmaceutical industry, contract research organisations and biotech companies.
- High quality data, with knowledgeable interpretation, within the defined timeframe.
- Fee for service and collaboration project options available.
- Client testimonials available.
- Flexible support for assay development, primary target screening, hit confirmation, lead optimisation and SAR, mechanistic and phenotypic studies.



# Integrated Drug Discovery.

Our highly experienced interdisciplinary team provides clients with a fully integrated drug discovery service by bringing together experts in:

- ion channel biology
- medicinal chemistry
- specialist chemistry
- translational biology
- ADMET
- **DMPK**

This integrated service spans initial assay development, custom assay validation and high throughput screening in 384-well plate-based assays. Metrion provides high quality electrophysiology-based support for medicinal chemistry optimisation of compounds, including an industry-leading suite of cardiac safety profiling assays. We also offer phenotypic assays on MEA and impedance platforms for target validation and mechanism-of-action studies in native rodent and human IPSC cell-based assays to facilitate the successful translation of lead compounds into preclinical and clinical testing.



# Experienced Integrated Drug Discovery Team

Alongside our partners, Metrion Biosciences has the experience to steer your research programme to a successful, and cost effective, conclusion. We offer wide ranging expertise and our suite of industry leading validated assays includes:

- Voltage- and ligand-gated ion channels
- Multimodal transient receptor potential (TRP) channels
- Two-pore domain 'leak' channels
- Inward rectifier channels
- Hyperpolarisation-activated cyclic nucleotide gated ion channels

# High Quality Small Molecule Library

Through Metrion Biosciences and our partners, clients can access a high quality library of 150,000 small molecules, a range of stable cell lines and validated assays, plus a choice of assay platforms to suit the requirements of individual customers.

Clients can access expert computational chemists for knowledge-based selection of a screening deck or we can perform diverse screens using the Assay. Works library alone or supplement this with client molecules or libraries accessed via compound vendors. Our team can either provide advice and build appropriate screening cascades for clients who do not possess significant experience of the ion channel target class or work together with experienced clients to maximise their chances of success for this challenging target class.

## **Metrion's Integrated Drug Discovery Service**



Our integrated drug discovery service involves:

- Extensive interaction with clients
- Closely defining the profile of compounds most appropriate to the therapeutic focus
- Outlining individual drug-like properties to maximise efficacy and limit side effects,
- Optimisation of each assay in the screening cascade to produce the most relevant data
- Maximising the efficiency of the design and synthesis of new analogues to enable rapid structure-activity relationship (SAR) determination at an early stage
- High quality assays to drive enhancement of compound potency and selectivity
  properties.
- Early assessment of ADME properties and ranking of hit compounds/ hit series
- Access to expert toxicologists able to design and perform experiments to characterise potential (for example on-target) or observed toxicity issues.
- Advice regarding appropriate biomarker assays to provide reliable biological translation for the discovery programme.



#### **Metrion Biosciences Limited**

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### About us



Launched in 2015



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**Metrion Biosciences**