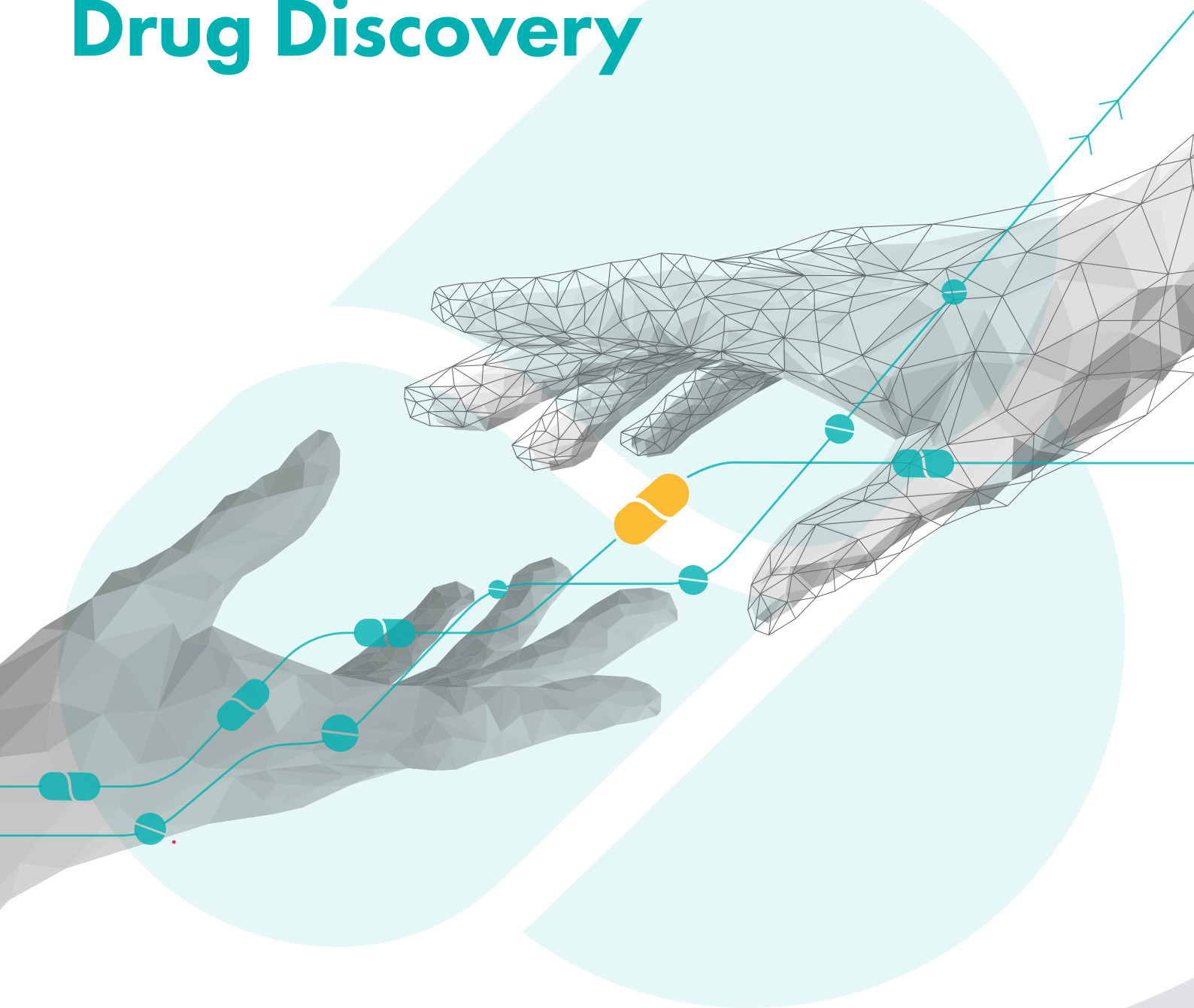


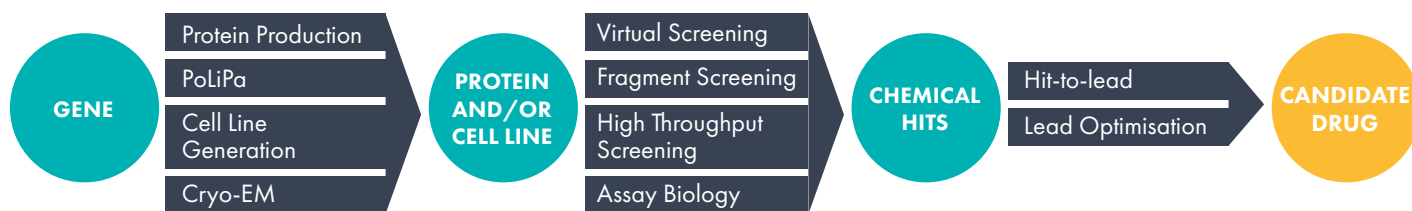
# Integrated Ion Channel Drug Discovery



## Integrated Ion Channel Drug Discovery

Our highly experienced interdisciplinary team provides the full range of pre-clinical drug discovery services supporting your **ion channel projects** at every stage of the drug discovery journey, from disease target nomination to candidate drug selection, and from protein production, cell line generation and assay development through to medicinal chemistry for lead optimisation.

Our dedicated experts will work collaboratively with you and your team to provide tailored scientific solutions, adding significant value to your drug discovery projects. Our integrated approach has a proven record of success in delivering timely and cost-effective solutions, and generating new intellectual property for our clients.



Together, with our strategic partners we bring a highly experienced interdisciplinary team, comprising of experts in the following areas and all based locally to Cambridge, UK:

- **Ion channel biology**
  - o Manual and automated patch clamp
  - o Cell-based assays using FLIPR platform
- Protein expression
  - o Traditional detergent-based methods
  - o PoLiPa: Domainex's proprietary platform for the efficient preparation of stable and highly purified membrane proteins, without the need for thermostabilising mutations or detergents
- Native and engineered ion channel cell lines, iPSC and translational biology
- **Cryogenic electron microscopy (cryo-EM)**
- Hit finding
  - o High throughput screening (HTS)
  - o Virtual screening
  - o *FragmentBuilder*: Fragment screening (including covalent fragments)
- **Hit-to-lead and lead optimisation medicinal chemistry**
- ADME and DMPK
- Animal models
- Computer aided drug design
- Cardiac safety screening

## Benefits of working with us

- Access to Domainex's expertise in drug discovery including hit-to-lead and lead optimisation medicinal chemistry and structural biology
- Domainex's proprietary PoLiPa technology providing access to membrane proteins (<https://www.domainex.co.uk/services/innovative-polymer-lipid-particle-polipa-technology>)
- Access to Metrion's expertise in ion channel biology
- Access to Cresset Discovery's expertise in ion channel computational chemistry
- Access to CNS/pain *in vivo* models established at Pharmidex
- Closely located facilities reducing design-make-test cycles
- Regular alliance meetings held to ensure effective communication
- Metrion's state-of-the-art ion channel drug discovery laboratories with specialist equipment:
  - o Automated electrophysiology: Qube 384, QPatch-48 and QPatch-II
  - o Characterisation of compound activity: Manual patch clamp, Multiple-Electrode Array and impedance
  - o HTS: Qube-384, FLIPR Penta, Agilent Bravo, Bravo BenchCel

Our team will successfully guide your drug discovery projects, advancing them from hit identification, hit validation, hit-to-lead, lead optimisation to candidate nomination. Making sure the projects are focused, de-risked and kept on track by constantly reviewing project milestones and progression against target product profiles.



**Domainex** is an award winning, fully integrated drug discovery CRO, serving biotechnology and pharmaceutical companies, and patient foundations globally.

Our scientists have worked on numerous ion channel programmes at all stages of preclinical research from hit identification through to candidate nomination. With the incorporation of cryo-EM, into our structural biology team, we are unlocking ion channel drug discovery projects by obtaining new structural insights.

[www.domainex.co.uk](http://www.domainex.co.uk)



**Metrion Biosciences** is a sector-leading contract research organisation specialising in preclinical ion channel drug discovery research services.

Metrion delivers comprehensive drug discovery outsourcing solutions to pharmaceutical and bioscience customers worldwide; all from a single, state-of-the-art UK-based research hub.

[www.metrionbiosciences.com](http://www.metrionbiosciences.com)



**Cresset Discovery** is a premier computational chemistry provider with extensive industrial experience and a proven track record in delivering drug discovery projects. Cresset Discovery scientists have worked on numerous ion channel programmes, where they deploy Cresset's proprietary XED forcefield and capabilities to provide valuable insights on the 3D shape and electrostatics of such systems, to support both ligand- and structure- based drug design.

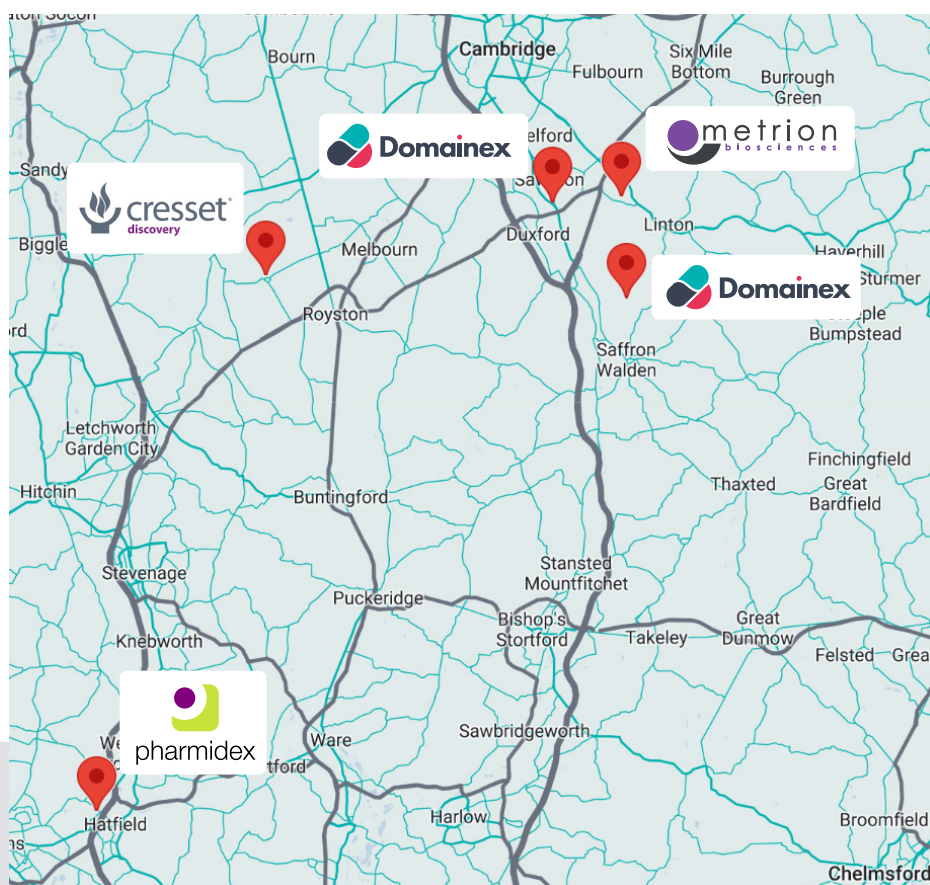
[www.cresset-group.com/discovery](http://www.cresset-group.com/discovery)



pharmidex

**Pharmidex** is a UK-based CRO founded in 2002 providing high quality, cost-effective and rapid solutions to clients in *in vitro* ADME, Pharmacokinetics (DMPK), bioanalysis (non-GLP, GLP/GCP) and toxicology (non-GLP, GLP). Pharmidex also offer efficacy models supporting oncology, CNS, respiratory, stroke and auto-immune disease programmes.

[www.pharmidex.com](http://www.pharmidex.com)



# About Domainex

Domainex is a fully integrated drug discovery service company based at Cambridge, UK. We serve pharmaceutical, biotechnology, academic organisations and patient foundations globally. We have ambitious growth plans and are expecting to reach 110 biologists and chemists in the near future. We provide integrated services, from disease target selection to candidate drug nomination. We have a very strong reputation for contributing innovative ideas, undertaking high-quality experiments and for generating intellectual property on behalf of our clients. We strive to build strong, dynamic relationships. In 2022, we served over 90 clients from the UK, Europe, the United States, Japan and Australia and had a project renewal rate of over 80%.

## How Can Domainex Help Your Drug Discovery Project?

Our highly experienced, multi-disciplined scientists – molecular biologists, protein biochemists, assay biologists, structural biologists, medicinal, computational and bio/analytical chemists, *in vitro* pharmacologists and ADME scientists – will support you to advance your drug discovery projects towards drug development effectively and efficiently. We provide customised programmes to address your specific needs at each stage of drug discovery. We draw from a wealth of expertise built up over the last 20 years across a wide range of drug targets and therapeutic areas. From our sites within Europe's leading bioscience hub at Cambridge, UK and with access to the very latest cutting-edge technologies, we are able to help you realise your goals and enrich your discovery pipeline.

## Contacts

If you would like to know more about Domainex's discovery services, or speak to us regarding your own drug discovery needs, please contact us at: [enquiries@domainex.co.uk](mailto:enquiries@domainex.co.uk)

Alternatively we can be contacted directly as follows:

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## Social



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