



Metrion Biosciences launches Nav1.9 high-throughput screening assay to strengthen screening portfolio and advance research on new medicines for pain

- *Validated drug discovery assay overcomes previous challenges in targeting Nav1.9 ion channels for chronic pain signalling*
- *Completes unique suite of rapid, scalable pain-related sodium channel assays and services to accelerate hit-to-lead and lead optimisation programmes*

Cambridge, UK, 28 April 2025: Metrion Biosciences (“Metrion”), the specialist preclinical contract research organisation (CRO) and a global leader in ion channel services, today announced the launch of its validated, high-throughput Nav1.9 screening assay to advance discovery and development of novel pain therapeutics. Leveraging over a decade of electrophysiology expertise, the Nav1.9 assay, alongside Metrion’s unique combination of ion channel expertise, bespoke assays and pain research services, enables researchers to overcome traditional limitations of Nav1.9 screening and generate reproducible and decision-ready data.

Nav1.9 is a voltage-gated sodium channel selectively expressed in peripheral sensory neurones that plays a key role in pain signalling. Mutations in Nav1.9 are associated with both severe pain and pain insensitivity in humans. Despite its potential as a non-opioid therapeutic target, research has been limited by difficulties developing stable heterologous expression systems.

Metrion’s new Nav1.9 assay complements the Company’s existing portfolio of efficacy and safety screening assays, adding new capabilities to accelerate and de-risk preclinical programmes, unlocking deeper insights into Nav1.9 pharmacology. Designed using a stable and validated CHO cell line, the assay has been developed and optimised in-house for high reproducibility and low variability and is available using both human- and rat-derived clones, providing insights into species selectivity for the development of more efficacious therapeutics.

The assay completes the Company’s full suite of pain-related sodium channel assays to provide selectivity profiling across Nav1.1 to Nav1.9. Metrion’s offering features a comprehensive portfolio of off-target counter screens, including other pain related ion channel targets and a CiPA panel for cardiac safety risk assessment. The Company also provides access to manual clamp-based mechanistic and translational assays, and automated patch clamp using the Qube 384 to provide highly sensitive, rapid analysis of large candidate libraries. Additional support for hit-to-lead and lead optimisation, streamlining compound evaluation and reducing project timelines is also provided.

“The availability of effective assays to study the Nav1.9 sodium channel has been a major stumbling block that has held back development of the next generation of non-opioid pain therapeutics,” said Dr Eddy Stevens, Chief Scientific Officer, Metrion Biosciences. “Metrion is now able to offer a unique combination of sodium channel expertise, high-throughput screening solutions and research services. These cover the full suite of pain-related sodium channels. By facilitating streamlined compound evaluation and accelerated lead optimisation, this service offering has the potential to bring novel pain therapeutics to market rapidly and more cost-effectively. This important launch represents a major milestone for Metrion, a testament to the dedication and knowledge of our team and reinforces our position as leading the field in ion channel drug discovery.”

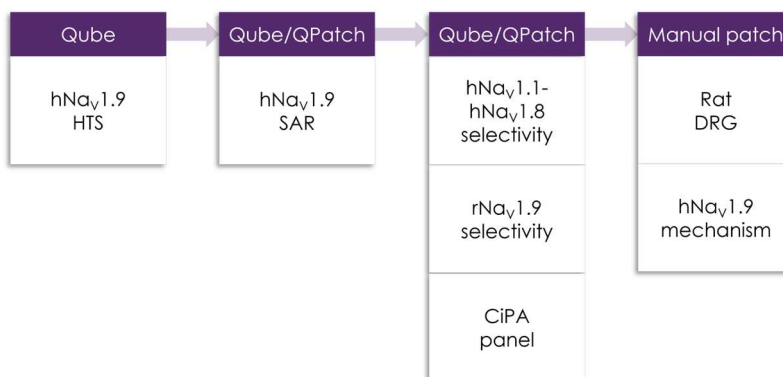
To find out more about Metrion’s unique approach to unlock Nav1.9 for breakthrough pain treatments, please visit: www.metrionbiosciences.com/neuroscience/nav1-9-assays/

ENDS

Notes to Editors



*Dr Eddy Stevens, Chief
Scientific Officer, Metrion
Biosciences*



Example of Metrion's Na_v1.9 screening cascade

For high resolution images please contact Zyme Communications

For further information please contact:

Katie Odgaard
Zyme Communications
E-mail: katie.odgaard@zymecommunications.com
Tel: +44 (0)7787 502 947

To opt-out from receiving press releases from Zyme Communications please email info@zymecommunications.com. To view our privacy policy, please [click here](#)

Sue Pepper
Metrion Biosciences
E-mail: sue.pepper@metrionbiosciences.com

To opt-out from receiving press releases from Metrion Biosciences please email sue.pepper@metrionbiosciences.com. View our [privacy notice](#).

About Metrion Biosciences

Metrion Biosciences is a specialist preclinical drug discovery contract research organization (CRO) and drug discovery business. The Company provides customers with access to a range of high-quality ion channel assays including an industry leading panel of *in vitro* cardiac safety assays, high-throughput screening, and translational research such as native cell and phenotypic assays for neurological and cardiotoxicity testing. Metrion also provides neuroscience focused assays with brain slices, DRG neurons, and other primary neurons.

Metrion's leadership has extensive and in-depth experience, offering careful interpretation of experimental findings, communicating results and providing strategic recommendations to support decision making to best inform screening strategy. Acting as an extension of our clients' research teams, Metrion provides tailored assay formats, quality assured data packages and traditional or bespoke and novel studies on a fee-for-service or collaboration basis.

For more information, please visit www.metrionbiosciences.com
LinkedIn: [@metrion-biosciences](#) | X: [@metrion_biosci](#)