



**Metrion Biosciences and The KCNC1 Foundation  
collaborate on development of new ion channel modulators  
for ultra-rare genetic disorder**

*Research targeted at identifying novel inhibitors or activators of  
K<sub>v</sub>3.1 mutation*

**Cambridge, UK and Toronto, Canada 07 December 2022:** Metrion Biosciences Limited ("Metrion"), the specialist ion channel contract research and drug discovery company, and The KCNC1 Foundation, a not-for-profit organisation focused on the development of a treatment for an ultra rare genetic disorder, today announced a collaboration to progress a hit identification research project for small molecule modulators of the potassium ion channel K<sub>v</sub>3.1, targeting KCNC1-related disorders.

Variants of the KCNC1 gene impact K<sub>v</sub>3.1 potassium channel function, resulting in neurodevelopmental disorders which can include progressive myoclonic epilepsy (PME) and developmental epileptic encephalopathy (DEE). Symptoms of KCNC1 disorder include seizures during infancy, vision impairment, developmental delay, intellectual disability and many others. The collaboration is focused on the identification of small molecule modulators of the variant potassium ion channel, K<sub>v</sub>3.1 as a potential therapeutic strategy for KCNC1-related disorders, identified as being the cause of KCNC1 related DEE. Metrion will develop cell lines for both wild type and variant K<sub>v</sub>3.1, to establish a fluorescence-based screen using FLIPR® Penta, a high-throughput cellular screening system. The high-throughput screen will then be used to identify novel inhibitors or activators of K<sub>v</sub>3.1 mutant channels.

The KCNC1 Foundation was created by the parents of a child diagnosed with KCNC1-related DEE to support research aimed at accelerating the development of a cure, as well as to raise awareness to identify and connect patients and provide support for families.

*"We are very excited to collaborate with Metrion on the possibility of identifying a potential therapeutic for children with KCNC1-related disorder. This is our first step of many to address the pathophysiology of the disorder, to give individuals suffering the opportunity to reach their full potential."* **Stephanie Telesca, Co-Founder of The KCNC1 Foundation, commented.** "We welcome any contributions toward [The KCNC1 Foundation](https://www.kcnc1.org) as we work hard to pave a path towards a cure."

**Dr Andrew Southan, Metrion's Chief Executive, said:** "I would like to thank The KCNC1 Foundation for choosing Metrion to progress this discovery research programme. Our team looks forward to helping the Foundation accomplish its goal to deliver efficacious treatments to patients as quickly as possible."

For more information, please visit [www.metrionbiosciences.com](https://www.metrionbiosciences.com) and [www.kcnc1.org](https://www.kcnc1.org).

Donations to The KCNC1 Foundation can be made through [gofundme](https://www.gofundme.com) or, for those in the USA, through the organisation's fiscal sponsor [The Rare Village](https://www.rarevillage.org).

-ENDS-

## Notes for Editors



**The KCNC1 Foundation**

For a high-resolution image, please contact Zyme Communications.

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### **About Metrion Biosciences**

Metrion Biosciences is a specialist ion-channel contract research organization and drug discovery business. The Company provides customers with access to a range of high-quality ion channel assays on a fee-for-service or collaboration basis. Metrion Biosciences' ion channel expertise includes an industry leading panel of in vitro cardiac ion channel safety assays, translational native cell and phenotypic assays for neurological and cardiotoxicity testing, and a range of other ion channel screening services such as cell line development and optimization. Metrion Biosciences is able to provide tailored assay formats, data analysis and reporting solutions, effective project management and quality assured data packages.

For more information, please visit [www.metrionbiosciences.com](http://www.metrionbiosciences.com) or [www.kcnc1.org](http://www.kcnc1.org) LinkedIn: [@metrion-biosciences](https://www.linkedin.com/company/metrion-biosciences) | Twitter: [@metrion\\_biosci](https://twitter.com/metrion_biosci)

### **About The KCNC1 Foundation**

The KCNC1 Foundation is a Canadian parent-led organization that was established in 2022 to give individuals with KCNC1-related disorders a chance at a brighter future. We will accomplish this through supporting research to accelerate the path to a cure, identifying key partnerships

to lead us through the drug development process, raising awareness to identify and connect patients affected by KCNC1-related disorders, and by providing support to their families. Since our inception, we have raised over \$50,000 that has gone directly to funding research and connected 19 families worldwide.

Donations can be made through gofundme (<https://gofund.me/00b67750>) or for those in the USA, through our fiscal sponsor, The Rare Village: (<https://give.rarevillage.org/give/411473/#!/donation/checkout>).

For more information, please visit <https://kcnc1.org>.