

For investors and media only

## Article mapping variants in thyroid hormone transporter MCT8 to disease severity published in Nature Communications

**Stockholm, Sweden, April 25, 2025.** Egetis Therapeutics AB (publ) (NASDAQ Stockholm: EGTX) wishes to highlight the recent publication in the journal *Nature Communications* of a seminal research article mapping genetic variants in monocarboxylate transporter (MCT) 8 to disease severity by genomic, phenotypic, functional, structural and deep learning integration (Groeneweg, van Geest et al. 2025). The loss-of-function (LoF) variants cause the rare neurodevelopmental and (treatable) metabolic disorder MCT8 deficiency in males. In this study, a world-wide consortium across 53 sites in 23 countries, conducted by Prof. Edward Visser at The Erasmus Medical Center (Rotterdam, Netherlands), systematically collected genetic, clinical and biochemical data from individuals with MCT8 deficiency, supplemented with information from all described MCT8 deficiency cases in literature and data from up to 406,975 non-affected individuals. These data were integrated with (i) molecular studies, utilizing different functional assays in cell lines expressing various MCT8 mutants and patient-derived cells, (ii) extensive 'alanine-scanning' of the MCT8 protein, and (iii) *in silico* approaches including a newly constructed MCT8 homology model, ultimately constructing a machine-learning based dual pathogenicity-severity classifier.

One of the key findings in this study was that treatment with tiratricol (Emcitate®) was equally effective in reducing serum total T3 concentrations, as well as improving clinical and biochemical outcomes irrespective of the functional impact of the underlying MCT8 variant, leveraging the potential impact of treatment on thyrotoxic features to all patients with MCT8 deficiency.

**Reference:** Groeneweg, S., van Geest, F.S., et al. Mapping variants in thyroid hormone transporter MCT8 to disease severity by genomic, phenotypic, functional, structural and deep learning integration. Nat Commun 16, 2479 (2025). <u>https://doi.org/10.1038</u>/s41467-025-56628-w

Egetis Therapeutics had no influence on the conduct or analysis of this study.

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## **About Egetis Therapeutics**

Egetis Therapeutics is an innovative and integrated pharmaceutical company, focusing on projects in late-stage development for commercialization for treatments of serious diseases with significant unmet medical needs in the orphan drug segment.

On February 13, 2025, the European Commission approved Emcitate<sup>®</sup> (tiratricol) as the first and only treatment for MCT8 deficiency in EU.

The Company's lead drug candidate Emcitate<sup>®</sup> (tiratricol) is under development for the treatment of patients with monocarboxylate transporter 8 (MCT8) deficiency, a highly debilitating rare disease with no available treatment. In previous studies (Triac Trial I and a long-term real-life study) tiratricol has shown highly significant and clinically relevant results on serum thyroid hormone T3 concentrations and secondary clinical endpoints. Triac Trial II investigated a potential treatment effect on neurocognitive development in young children under 30 months with MCT8 deficiency. The study did not show a statistically significant improvement compared to historical controls.

After a dialogue with the FDA, Egetis is conducting a randomized, placebo-controlled pivotal study in at least 16 evaluable patients to verify the results on T3 levels seen in previous clinical trials and publications. As previously communicated, the Company will update the market as soon as recruitment closes, and at that time, the Company will also provide information on when to expect topline results and when the Company plans to submit the NDA application.

Tiratricol holds Orphan Drug Designation (ODD) for MCT8 deficiency and resistance to thyroid hormone type beta (RTH-beta) in the US and the EU. MCT8 deficiency and RTH-beta are two distinct indications, with no overlap in patient populations. Tiratricol has been granted Rare Pediatric Disease Designation (RPDD) which gives Egetis the opportunity to receive a Priority Review Voucher (PRV) in the US, after approval. This voucher can be transferred or sold to another sponsor.

The drug candidate Aladote<sup>®</sup> (calmangafodipir) is a first in class drug candidate developed to reduce the risk of acute liver injury associated with paracetamol (acetaminophen) overdose. A proof of principle study has been successfully completed. The design of a pivotal Phase IIb/III study (Albatross), with the purpose of applying for market approval in the US and Europe, has been finalized following interactions with the FDA, EMA and MHRA. The development program for calmangafodipir has been parked until Emcitate marketing authorization submissions for MCT8 deficiency have been completed in the EU and the USA. Aladote has been granted ODD in the US and in the EU.

Egetis Therapeutics (Nasdaq Stockholm: EGTX) is listed on the Nasdaq Stockholm main market. For more information, see www. egetis.com

## Attachments

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