

Eternygen GmbH Press release Berlin, 10 February 2020

Eternygen Presents Data Demonstrating INDY Inhibition as Novel Therapeutic Option in NASH

- Study to be presented at 3rd Global NASH Congress in London, U.K., February 10, 11
- Data show, for the first time, that INDY inhibition attenuates diet-induced NASH and mINDY inhibitors may be a novel therapeutic option
- In a murine NASH model, a small molecule INDY inhibitor reduced transaminases, hepatic injury, steatosis and inflammation, and improved glucose metabolism and body composition compared to vehicle-treated mice

Berlin, Germany, 10 February 2020: Eternygen GmbH, a privately owned, Berlin-based metabolic diseases company, today announced that it is presenting a poster at the 3rd Global NASH Congress held in London, UK from February 10 - 11, 2020 (ElAgroudy et al.). The presentation provides data from a preclinical study which demonstrates that inhibiting the plasma-membrane tricarboxylate transporter INDY (I'm Not Dead Yet/NaCT), encoded by the longevity gene mIndy/SLC13A5, using a small molecule, is able to reverse nonalcoholic steatohepatitis (NASH) in a diet induced NASH mouse model.

INDY inhibition (INDYi) significantly reduced transaminase levels ALAT by 59% (146.2 ± 29.2 U/L INDYi, 353.9 ± 37.5 U/L vehicle, $P < 0.001$) and ASAT by 39% (354.4 ± 55.2 U/L INDYi, 582.7 ± 28.1 U/L vehicle, $P < 0.01$) indicating reduced liver injury. Hepatic triglyceride accumulation was decreased by 31% ($P < 0.05$). Moreover, Fluorescence-activated cell sorting (FACS) analysis for intrahepatic immune cells showed marked reduction in total number of both lymphoid and myeloid cells e.g. monocyte-derived macrophages, Kupffer cells, and monocytes were reduced by 73%, 66% and 58% respectively ($P < 0.01$).

Prof. Dr. Andreas Birkenfeld, one of Eternygen's scientific founders and a recognized opinion leader in INDY research, said: "For the first time, these studies have validated the therapeutic potential of our target protein INDY in NASH. The data provide proof of concept that regulating intracellular metabolic processes through inhibition of INDY is a feasible approach to treat NASH. The current understanding of the pathophysiology fits nicely with this mode of action. Based on the new experiments and earlier data in INDY knockout mice, we see a unique profile with beneficial effects on early stage NASH, as well as on later stage inflammation and fibrosis as well as cardiovascular risk factors. These are encouraging results and provide new promise for patients and care givers."

In January 2020 Dr. Birkenfeld, Professor of Medicine, saw his research, "Solute Carrier Transporters as Potential Targets for the Treatment of Metabolic Disease" [published](#) in the peer-reviewed, Pharmacological Reviews from the American Society for Pharmacology and Experimental Therapeutics.



In October 2019, Prof. Birkenfeld was appointed Director of the Department of Diabetology, Endocrinology and Nephrology at the University Clinic, Tübingen. He is also [now](#) Director of the Helmholtz Center for Diabetes Research and Metabolic Diseases in Tübingen as well as a TransCampus Professor of Diabetes and Reader at King's College London .

Marco Janezic, CEO Eternygen GmbH, said: “These data confirm the unique pleiotropic mechanisms of INDY inhibition in addressing metabolic dysregulation as the root cause of NASH and subsequent complications (incl. inflammation and fibrosis) as well as validating its role in restoring liver function. We are now evaluating the next development steps necessary to bring this drug candidate into the clinic.”

ABOUT ETERNYGEN GMBH

Eternygen is a Berlin-based Biotech Company founded in June 2012 to focus on the research, development and marketing of NaCT inhibitors for the treatment of dietary-related metabolic diseases. The founding team consists of renowned scientists from leading German universities and academic institutes as well as serial entrepreneurs from the venture and industry community. Eternygen is a virtual company supported by a network of senior industry experts and contract research organizations. Eternygen shareholders include Epidarex Capital, Evotec SE, VC Fonds Technologie, Berlin, Germany managed by IBB Beteiligungsgesellschaft mbH, and two renowned family offices. For additional information please go to www.eternygen.com.

CONTACT INFORMATION – For further information, please contact

Eternygen:

Marco Janezic, CEO. Ph. +49 30 1207 6983 – 0; email: m.janezic@eternygen.com

Dr. Grit Zahn, Head of Research. Ph. +49 30 1207 6983 – 1; email: g.zahn@eternygen.com

MC Services:

Raimund Gabriel, Managing Partner. Ph. +49 89 210 228 – 30; eternygen@mc-services.eu

Eternygen GmbH

Müllerstr. 178 c/o Bayer CoLaborator S141 • D- 13353 Berlin • Tel. +49-30-1207 6983 0 • Fax +49-30-1207 6983 3 •
Berliner Sparkasse • Kto.-Nr. 190 138 149 • BLZ 100 500 00
Managing Director / Geschäftsführer: Marco Janezic
Berlin • HRB 143 953 B • Amtsgericht Charlottenburg