European Journal of Gastroenterology & Hepatology, an international, peer-reviewed journal publishes article about novel ciliate lipases as candidates for EPI:

Leading journal presents in vitro studies for endogenous Ciliate lipases as therapeutic candidates for oral treatment of exocrine pancreatic insufficiency (EPI).

Münster, Germany, October 20th 2016, Cilian AG, a biopharmaceutical company focused on the development of subunit vaccines, enzymes and monoclonal antibodies, announces that the European Journal of Gastroenterology & Hepatology, the international, peer-reviewed, online publication journal, has published an article entitled:

Novel ciliate lipases for enzyme replacement during exocrine pancreatic insufficiency.

The European Journal of Gastroenterology & Hepatology publishes papers reporting original clinical and scientific research which are of a high standard and which contribute to the advancement of knowledge in the field of gastroenterology and hepatology.

Alexander Brock and Dr. Ingo Aldag, the first authors of the article, are from Dr. Jürgen Schnekenburgers Laboratory, the Biomedical Technology Centre of the Medical Faculty of the University of Münster, Germany, and from Cilian AG, Münster, Germany.

The authors demonstrated successfully in a study the expression of three ciliate lipases using of CILIANs CIPEX-System as a recombinant protein expression platform for production and subsequent characterisation of the lipases under *in vitro* conditions.

They concluded that: "The lipases are, compared to porcine pancreatic lipase and even rizolipase, more stable under low ph conditions. In consequence, these the ciliate lipases are promising candidates for enzyme substitution in EPI."

Commenting on the paper, Dr. Marcus Hartmann, CSO of Cilian AG: "It is gratifying and encouraging that in collaboration with the independent research groups of Dr. Jürgen Schnekenburger (University of Münster, Germany) and Prof. Waldemar Uhl (Pancreatic Centre, St. Josef-Hospital Bochum, Germany), we could demonstrate that the biotechnological production of ciliate lipases is possible. Furthermore we could demonstrate that these endogenous Ciliate lipases show *in vitro* almost optimal features for the digestion of fat in the human gastrointestinal tract."

Dr. Jürgen Schnekenburgers Laboratory, head of the Biomedical Technology Centre of the Medical Faculty of the University of Münster added: "The combination of these newly discovered and for the first time characterized ciliate lipases could help to overcome the limitations of pancreatin based formulation such as low pH activity, high intake of enzymatic units and the potential risk of viral contamination."

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