

Enteropeptidase: A gene associated with a starvation human phenotype as a novel target for the treatment obesity and type II diabetes

Itzik Harosh

ObeTherapy Biotechnology, France

Many obesity related genes have been proposed as targets for the treatment of obesity. However, these obesity genes did not provide efficient drug therapy for obesity treatment. This is mainly due to the redundancy of the biochemical pathway involved in obesity and the lack of specificity of the gene targets. It is therefore a challenge to identify crucial gene(s) targets involved in energy metabolism associated with "lean or starvation phenotype".

Congenital Enteropeptidase deficiency is an extremely rare pathology which answer to all these criteria. Enteropeptidase catalyzes the conversion of inactive trypsinogen into active trypsin via the cleavage of the acidic propeptide from trypsinogen.

We have generated knock out transgenic mice for enteropeptidase which shows the same phenotype like in human. These data and in vivo preclinical data using per os small molecule for long term treatment (9 weeks) will be presented.

Biography

Itzik Harosh is the founder & CEO of ObeTherapy a biotech dedicated to the discovery of new genes for obesity and diabetes treatment based on the lean phenotype and the development of molecules for the treatment of metabolic syndrome. Prior to the creation of ObeTherapy he was a Group leader in GSK in France where he learned the art of drug discovery, targets identification and validation. Harosh did his PhD at The Weizmann Institute of Science in Israel, working on DNA repair enzymes which was followed by four years of post doctoral experience at Stanford and at Davis University, California, US. From there he moved to France where he worked in the CNRS at the laboratory of Miro Radman. Dr. Harosh is the author and co-author of 15 articles and 8 patents all dealing with obesity, diabetes and HTS. Dr. Harosh is on the editorial board of, Journal of US-China Medical Science and is regularly invited to international Obesity, Diabetes and metabolic syndrome conferences.

iharosh@obetherapy.com