

World Congress on ENDOCRINE AND DIABETES

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Starvation human phenotype open new avenue target for obesity and type II diabetes treatment.**Harosh Itzik***Marma Health Centre, India*

The treatment of obesity and type II diabetes has often targeted obesity-related genes. None of these, however, have provided efficient drug therapy. This is mainly due to the enormous number of genes involved in weight and energy management, the redundancy of the biochemical pathway and the environmental factors. We have focused instead on genes that are associated with "lean or starvation human phenotype" that become very rare in the long term of evolution. This has led to the identification of the congenital enter peptidase deficiency gene as a potential target for obesity and type II diabetes treatment. The advantage of this target is that it is expressed exclusively in the intestine, a peripheral target as opposed to a systemic target and it is not a redundant target. I will discuss the advantages of rare genetic diseases associated to «lean or starvation phenotype» that can open new avenues for the identification of new targets and the development of new drugs for the treatment of common metabolic disorders. I will also discuss new potent inhibitors around a borarginine or borolysine motif that can inhibit in vivo the enter peptidase activity and diminish the rate of increase in body weight.

Biography

Itzik Harosh is the founder & CEO of ObeTherapy (January 2000 -July 2019) 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. He established the concept to look for new genes associated to starvation phenotype based on rare genetic diseases for the treatment of obesity and type II diabetes. Prior to the creation of ObeTherapy he was a Group leader in GSK in France where he learned the art of drug discovery, target identification and validation. Harosh did his PhD at The Weizmann Institute of Science, Rehovot, Israel, working on DNA repair enzymes (1982-1987) which was followed by four years of post doctoral experience at Stanford and at Davis University, California, US. (1987-1991). From there he moved to France where he worked in the CNRS at the laboratory of Miro Radman. From there he moved to Glaxo Wellcome where he learned the art of drug discovery and target identification and validation.

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