

A new product to reduce obesity in humans

A new molecule that reduces the lipid content in humans has been discovered. This allows the treatment of obesity and other illnesses where an abnormal accumulation of fat is present, like fatty liver disease (FLD). The lack of decisive therapeutic approaches for these high-prevalent diseases raises the need for alternative treatments. Partners to further develop this technology and/or to establish licensing agreements are sought.

The Need

Obesity is a multifactorial metabolic disorder that is associated with a cluster of chronic and progressive diseases. There are few treatments that produce modest weight loss but little is known about how these drugs affect longer-term complications of obesity. Bariatric surgery is the most effective procedure, however, due to its costs and the risk of complications, other effective yet less invasive treatments are needed.

The Solution

Low plasma levels of the identified molecule are associated with abdominal adiposity and predict the development of type 2 diabetes. Beyond this biomarker role, it has been demonstrated that it plays a role in the development and progression of these diseases by reducing the lipid content in human adipocytes due to its role as lipolytic agent and inhibitor of the lipogenesis route. Therefore, this is a good target for the treatment of obesity and its related illnesses.

Innovative Aspects

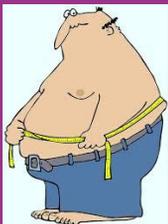
- ✓ In contrast with current treatments for overweight, which act preventively by reducing lipids absorption (orlistat) or suppressing the appetite (lorcaserin, phentermine), here it is proposed a treatment to actively reduce lipid accumulation in human tissues.
- ✓ This is the first time this molecule is found to be a therapeutic target for diseases where an abnormal accumulation of fat is present, such as overweight, obesity or fatty liver disease.

Stage of Development

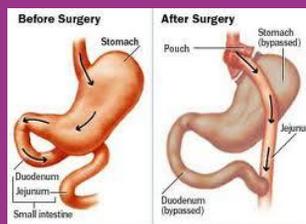
- ✓ It has been demonstrated *in vivo* that expression of this molecule reduces body weight increase upon a fat-enriched diet.
- ✓ The results were validated in transgenic mice, human adipocytes and human liver biopsies. We are currently seeking for an appropriate way of administration in humans, depending on the disease that needs to be targeted.

Target Market

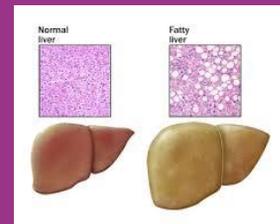
Both pharmaceutical and cosmetic companies, depending on the illness that needs to be targeted: overweight, obesity or fatty liver disease.



Cartoon depicting obesity, already an epidemic disease



Schematic representation of bariatric surgery



Pathology of fatty liver disease

IP rights

EP priority application

Portfolio of technologies

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We are looking for...

Partners to establish co-development or licensing agreements in order to further develop the different potential applications of this technology.

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