

FIBICO – Biomarkers of response to bariatric surgery

Abstract

A research group from the Andalusian Public Health System (SSPA) has identified a series of biomarkers to predict the response of subjects undergoing bariatric surgery.

Description

Bariatric surgery is currently the most effective treatment for the long-term management of severe obesity and metabolic syndrome, over other therapies (diet, lifestyle changes, exercise, pharmacological therapies) that have high recurrence rates with insufficient weight loss and insufficient improvement in associated metabolic comorbidities.

The object of the present invention is to establish the pre-operative status of subjects for predicting response to bariatric surgery for weight loss and improvement of associated comorbidities.

To this end, a panel of molecular biomarkers has been identified that define the status of subcutaneous adipose tissue, which is associated with a better response to bariatric surgery. Similarly, the level of oxidised LDL expression has been identified as a surrogate plasma marker that also allows prediction of an individual's response to bariatric surgery.

Advantages

1. Control of body weight loss and improve associated metabolic comorbidities, mainly lipid and glucose metabolism.
2. Reduce the risk of unnecessary complications of the intervention.
3. Establish personalised guidelines to help monitor individual progress.

Industrial/ intellectual protection

This technology is protected by international patent (PCT).

Objective of the Collaboration

Seek a collaboration that leads to the commercial exploitation of the invention presented. The terms and conditions of the license agreement can be discussed openly if the technology presented is of interest.

Clasification

Activity/Type: Endocrinology
Pathology: Bariatric Surgery

Representative Institution and Inventor

The principal researcher behind the innovation is Rocío Guzmán Ruiz, of group GC11 Adipocyte metabolism and differentiation. Metabolic syndrome.

The development of the project has been possible thanks to the Andalusian Health Service and the University of Cordoba.

Contact information

Fundación para la Investigación Biomédica de Córdoba (FIBICO)

Edificio IMIBIC, Avda. Menéndez Pidal s/n, 14004 Córdoba

Luis M. Fernández Formoso | Head of Unit – Innovation and Technology Transfer: luism.fernandez@imibic.org