

IN VITRO METHOD FOR THE DIAGNOSIS AND/OR PROGNOSIS OF POLYCYSTIC OVARY SINDROME (PCOS)

A research group from IRYCIS, the University of Alcalá and CIBER has identified potential biomarkers linked to PCOS, developing a new single step-assay to enhance the process of diagnosing the syndrome in women.

The Need

Currently, the process of diagnosing a woman with PCOS in clinical practice still presents with unsolved challenges. For instance, the cut-off values for defining hirsutism using clinical scores are controversial. Furthermore, the widespread implementation of reliable assays is still pending in most routine laboratories worldwide (and also can carries a certain risk of misdiagnoses).

In short, there is an unmet medical need of biomarkers that properly identify women with PCOS.

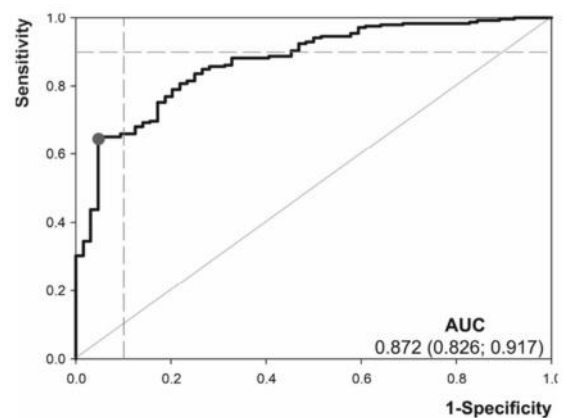
The Solution

The present invention is focused on solving this problem and an innovative method for the diagnosis and/or prognosis of PCOS is herein provided.

The inventors used miRNA PCR assays to analyse specific circulating miRNAs that had shown a strong association with PCOS in a validation study previously conducted by their group, in combination with proton nuclear magnetic resonance spectroscopy (1H-NMRS) assays for metabolomics profiling.

Innovative Aspects

- Potential of stratifying patients suffering from PCOS by utilizing the biomarkers or signatures of the invention, enabling the personalization of treatment
- These novel circulating biomarkers combined with data from specific hormonal levels, showed an excellent performance in identifying women with all PCOS phenotypes.
- The biomarkers allow the possibility of combining them, contributing to the increase in sensitivity and specificity for the early detection of PCOS
- The biomarkers could also allow the monitoring of the effect of therapies in PCOS patients.



Stage of Development:

The technology is currently undergoing the preclinical phase of its development.

Intellectual Property:

- Priority patent application filed (December 2024)

Aims

Looking for a partner interested in a license and/or a collaboration agreement to develop and exploit this asset.

Contact details