Technology Offer

BIOMARKERS OF INFLAMMATORY BOWEL DISEASES

Research groups from Health Service of Madrid (Hospital de la Princesa), Center for Cooperative Research in Biosciences (CIC bioGUNE) and CIBER has developed a method to discriminate between Crohn's Disease (CD) and Ulcerative Colitis.

The Need

Crohn's disease (CD) and Ulcerative Colitis (UC) are the two main forms of inflammatory bowel disease (IBD), and their diagnosis is based on a combination of clinical, endoscopic, histological and radiological criteria, with no pathognomonic diagnostic criteria of disease to date. Because these are chronic and disabling diseases with a high personal and social cost, it is important to identify novel biomarkers to support the correct diagnosis of the IBD. However, currently, there are no biomarkers, implemented in clinical practice, that could discriminate between both diseases.

The Solution

The present invention discloses new markers that allow differentiation of inflammatory bowel disease (IBD) patients as well as between Crohn's disease (CD) and ulcerative colitis (UC).

The method is based on the analysis of proteins and/or nucleic acids obtained from serum or intestinal tissue, using standard analytical techniques such as enzyme-linked immunoassays (EIA), quantitative nucleic acid amplification (qPCR) or immunohistochemistry.

Advantages

- **Selective diagnostic:** In addition to discriminating between patients with inflammatory bowel disease and healthy controls, this method can also discriminate between ulcerative colitis and Crohn´s disease patients, patients with severe or mild ulcerative colitis and severe Crohn´s disease.
- **Non-invasive method:** The method is based, in one of its applications, on the analysis of proteins and/or nucleic acids obtained from serum.
- **Relevance:** This is the first time that biomarkers associated with IBD have been described instead of colonoscopy, a technique commonly used in the clinic. They allow early detection of the disease, before the patient has received any treatment, enabling a more accurate diagnosis with a consequent improvement in the patient's quality of life. Their implementation in clinical practice could lead to a more rational and efficient use of drugs for the treatment of CD, optimising indications and minimising side effects and associated costs.

Intellectual Property: Priority Spanish patent application filed (August, 2024)

Aims

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

Contact details

Consorcio Centro de Investigación Biomédica en Red *(CIBER)*

otc@cibersciii.es
https://www.cibersciii.es/en