BIOSIGNATURES FOR ULCERATIVE COLITIS

Predictive biomarkers for the diagnosis & management of ulcerative colitis

OVERVIEW

Ulcerative colitis (UC) is one of the **2 major types of inflammatory bowel disease (IBD),** along with Crohn's disease. IBD is thought to affect 0.5% of the world population.

Chronic ulcerative colitis is associated with an elevated risk of developing colonic carcinoma. Although the **cause of UC is currently unknown,** its origin is suspected to be related to immune, inflammatory and environment causes.

The diagnostics of UC is currently based upon a combination of several exploration techniques. Clinical management is adapted to the disease stage, extent and intensity of the disease symptoms and manifestations, but **treatment is far from optimal**.

PROJECT

Sector: Gastroenterology

R&D direction:
Diagnosis of Ulcerative Colitis
Guidance for UC treatment

Stage of development: TRL2-3

Scientific leader: Dr. Josep Manyé

Clinical Advisor: Dr. Eugeni Domènech

PRODUCT

Potential indications:
UC diagnosis and management

Mechanism of action:
Circulating biomarkers test

Market size: 420K tests per year

Market value: €19-27M per year

IP PROTECTION

Patent at National Phase

OPPORTUNITY

License out

Co-development

NEEDS

Prolonged and **unnecessary exposure to corticosteroid**, and the lack of control of the inflammatory process, **increases morbidity.**

Glucocorticoids are the first-line of treatment for moderate-to-severe flare-ups. However, **up to 40%** of patients do not have an adequate response.

The diagnosis of UC is difficult, time consuming and expensive. Moreover, many of the clinical biomarkers of inflammation are not specific. There are **no predictors** of response that can be applied before the beginning of corticoids treatment.

SOLUTION

Our project proposes to create a:

- **Biosignature to manage the non-responder corticosteroids patients with a personalized approach**.

A new resolutive method to discern responder patients from non-responder patients, **previous to the beginning of the treatment.**

Consisting in the identification of a set of **circulating biomarkers** that correlates with the ulcerative colitis disease and are indicative of **patient's responsiveness** to corticosteroid treatment.

KEY ADVANTATGES

- Easily accessible: from blood sample
- Tool to allow disease confirmation and improve clinical patient stratification
- Tool to improve treatment management
- Predictive and personalized
- 100% accuracy and 90% general capability predictive potential (in combination with clinical plasma/ urinary routine analysis)