

## TECHNOLOGY OFFER

### CLINICAL INDICATION

Ulcerative colitis (UC) is one of the 2 major types of inflammatory bowel disease (IBD), along with Crohn's disease.

The incidence of UC may vary from 0.5 to 31.5 per 100.000 people each year, depending on the studied population.

The prevalence ranges from 37.5 to 238 per 100.000 people in North America and in parts of western Europe. UC is associated with multiple pathogenic factors including environmental changes, susceptibility gene variants, qualitatively and quantitatively abnormal gut microbiota and a broadly dysregulated immune response. But the identification of precise environmental, genetic, microbial and immune factors is still out of reach and, consequently, treatment is far from optimal.

Currently, the glucocorticoids are the first-line of treatment for of moderate-to-severe flare-ups. However, up to 40% of patients do not have an adequate response. Mechanisms of steroid-refractoriness in UC remains unknown. In addition, corticosteroid failure impair the effectiveness of rescue therapies.

### IP STATUS

Patent On Going

### OPPORTUNITIES

Licensing-out/Co-development

Contact Details:

Núria Martí Ras | nmarti@igtp.cat | Innovation and Technology Transfer Unit

## TECHNOLOGY ASSET

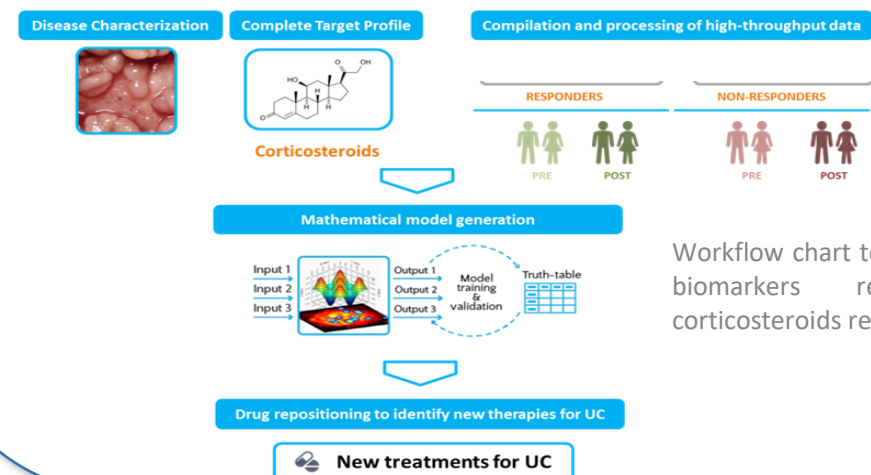
Prolonged and unnecessary exposure to corticosteroid, and the lack of control of the inflammatory process increases morbidity.

There are clinical and analytical variables that applied to the third day of treatment can predict a poor response to corticosteroids.

There are no predictors of response that can be applied before the beginning of corticoids. To resolve the inadequate corticoids treatments and administered effective medical regime to treat IBD patients that no response to corticosteroids medication, IGTP group propose:

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

The combination biosignature provides an 100% accuracy and 90% general capability predictive potential, in combination with clinical plasma/urinary routinary analysis the technology provides a new resolutive method to discern responder patients from non-responder patients, previous to the beginning of the treatment, avoiding undesirable effects of corticosteroid treatments in non-responder patients.



Workflow chart to discover new biomarkers related with corticosteroids response.