

Predictive method of anti-TNF-alpha therapy response in patients with Crohn's disease.

A research group from CIBER, Health Service of Andalucía and University of Córdoba has developed a method to predict the response to anti-TNF-alpha treatment by determination and quantification of basal expression levels of a plasmatic protein

The Need

Efficacy of treatment of Crohn's disease (CD) is heterogeneous. Thus, primary lack of response to anti-TNF- α treatment occurs in up to 10-20% of patients with IID in real life cohorts. Secondary loss of response in patients with CD ranging from 23% to 46% after 12 months of anti-TNF- α treatment.

Since the long-time use of TNF- α inhibitors is expensive and is associated with the development of significant side effects (risk of infections, lymphoproliferative disorders, autoimmune events, demyelinating diseases, and heart disease) the identification of non-invasive predictors of response to anti-TNF- α therapy would allow a more efficient prescription of these drugs, thus optimizing the indications and minimizing side effects and costs.

The Solution

The present work focuses on the use of basal expression levels of a specific protein, measured in plasma samples, as a new reliable biomarker to predict the response to treatment with anti-TNF- α drugs in patients with CD.

This new marker is used in combination with other clinical data: Baseline Crohn's Disease Activity Index, induction with corticosteroids and previous bowel resection history.

Advantages

- **Selective diagnostic:** This method allows the identification of patients with CD and with high risk of primary and secondary lack of response to anti-TNF-alpha treatment.
- **Non-invasive method:** The analysis of protein expression levels is performed in plasma samples.
- **Quick and low cost:** Determination of protein plasmatic levels by ELISA standard techniques.
- **Relevance:** Its implantation in the clinical practice could enhance a more rational and efficient use of drugs for the treatment of CD, optimizing the indications and minimizing side effects and associated costs.

Intellectual Property:

- Priority Spanish patent application filed (February, 2023)

Aims

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

Contact details