

Gastroenterology

Elevated Oncostatin M Predicts Non-response to Anti-TNF Therapy

Brief Description of Technology

Oncostatin M biomarkers are associated with non-response to Infliximab therapy

TECHNOLOGY ID

2019-0801

COMPLEMENTARY TECHNOLOGY

2021-0602

BUSINESS OPPORTUNITY

Exclusive License or Sponsored
Research

TECHNOLOGY TYPE

Diagnostic

PATENT INFORMATION

US Non-Provisional Filing

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Technology Overview

Therapeutic options for moderate-to-severe Crohn Disease (CD) include monoclonal antibodies (mAb) that antagonize circulating or tissue-bound inflammatory cytokines and leukocyte recruitment pathways. MAb's targeting tumor necrosis factor-alpha (anti-TNF) have become and remain the most commonly used first-line biologic agents for children with moderate-to-severe CD. Despite high rates of clinical response to anti-TNF (75%-88.4%), many children and adults continue to experience symptom flares and serious disease complications as rates of mucosal healing range between 36% and 46% with only 19%-36% achieving deep remission (both clinical remission and mucosal healing). Although rates of deep remission are likely to improve with increased utilization of anti-TNF dosing a sizable percentage of children will continue to fail anti-TNF. Despite the heterogeneity of CD phenotypes treatment selection is currently based on clinical factors that poorly define CD subtype. Thus, there is a need in the art for improved methods for the selection of treatment of individuals having CD, including methods that help to identify and stratify patients that may respond to certain therapeutics.

Applications

- Monitor or select CD patients to use anti-TNF therapy
- Identify patients with lower probability achieving remission using Infliximab

Advantages

Identify patients sooner that may not respond to Infliximab and convert to other treatments sooner

Market Overview

- CD may affect 565K and as many as 780K in the US.
- Prevalence of CD in children was measured at 58/100K and in adults approximately 241/100K.

Investigator Overview

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