

A Novel Inflammatory Bowel Disease Marker

Tech ID: 23704 / UC Case 2013-401-0

BACKGROUND

Inflammatory Bowel Disease (IBD) includes two disease states, ulcerative colitis (UC) and Crohn's disease (CD), and is increasing in prevalence in developed as well as developing countries. Both disease states are chronic and can have debilitating effects on patients' lives. As a result, management of IBD involves ongoing evaluation of disease status and intensive treatment of symptoms, which vary in frequency and severity between patients. While biomarkers to determine disease activity have been identified, their value for predicting long-term disease outcome is controversial. A reliable, prognostic biomarker that could determine relapse risk would have great potential implications in improving patient management and utilization of clinical resources. To date, there is no biomarker that can reliably predict the chance of relapse or future disease development.

INNOVATION

Researchers from UCLA's Digestive Diseases Research Center have identified a biomarker that correlates with disease development in UC patients. Using a comprehensive set of criteria, the researchers quantified disease development in patients for two years after biomarker analysis. UC patients stratified into the 'low-risk' biomarker group had significantly lower disease development scores (~45%) compared to patients in the 'high-risk' group.

APPLICATIONS

- Clinical management of UC patients
- Optimization of pharmacological interventions during remission

ADVANTAGES

- Potential to improve use of clinical resources
- Potential to reduce toxicity from chronic pharmacological therapy
- Potential to mitigate the severity of symptoms in patients with a high-risk for relapse

STATE OF DEVELOPMENT

The researchers have examined the biomarker in a study of 23 UC patients using colonic biopsies. Continuing studies are examining a larger study population using serum and colonic biopsies. This also includes both UC and CD patients. This will compare and correlate with existing biomarkers such as C-reactive protein, calprotectin and ESR values. We expect that this new biomarker will be used clinically to predict with current IBD disease activity and/or future prognosis of IBD.

PATENT STATUS

| Country | Type | Number | Dated | Case |
|--------------------------|---------------|-----------|------------|----------|
| United States Of America | Issued Patent | 9,772,334 | 09/26/2017 | 2013-401 |

ADDITIONAL TECHNOLOGIES BY THESE INVENTORS

- ▶ [Novel Biomarker For GI Diseases](#)

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OTHER INFORMATION

KEYWORDS

biomarker, inflammatory bowel diseases, biopsy, ulcerative colitis, IBD

CATEGORIZED AS

- ▶ **Medical**
 - ▶ Diagnostics
 - ▶ Disease: Autoimmune and Inflammation
 - ▶ Disease: Digestive System

RELATED CASES

2013-401-0

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