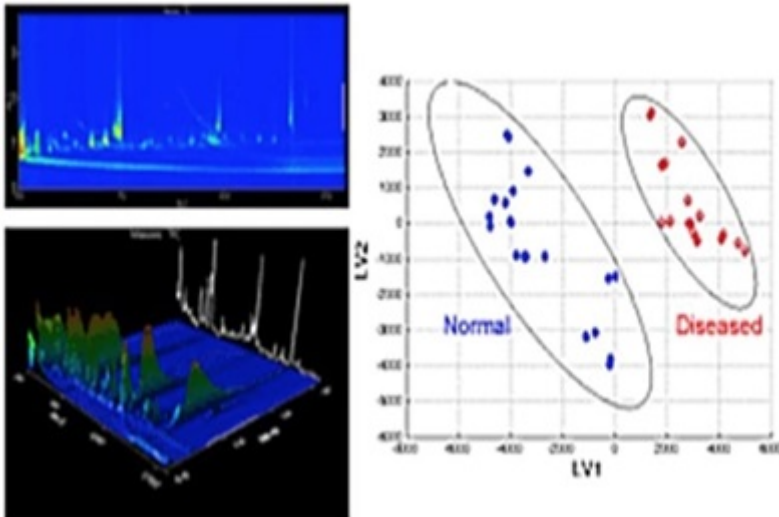


Metabolite Biomarkers for the Detection of Colorectal Cancer

The technologies offer a simple yet powerful method for identifying serum markers of disease in colon cancer from peripheral blood. These technologies offer high sensitivity and specificity as compared to standard diagnostic methods such as colonoscopy but offer additional utility as they require no in-office clinical procedure. Together, they offer a promising new diagnostic and monitoring tool to support clinical decision making in colon cancer.



What is the Problem?

Colon cancer is a prevalent health issue, and while improvements in detection have led to better outcomes, there are limited options for patients unwilling or unable to undergo screening through conventional methods. Conventional diagnostic methods, such as colonoscopy, can be invasive and uncomfortable for patients, creating a need for alternative, non-invasive diagnostic tools.

What is the Solution?

The innovation offers a new diagnostic and monitoring tool for colon cancer by identifying serum markers of the disease in peripheral blood. It provides a statistical model based on a

Technology ID

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Category

Research Tools
Therapeutics/Gastrointestinal
Therapeutics/Oncology
Therapeutics/Platform
Technology
Selection of Available
Technologies

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patient's serum free amino acid profile, utilizing LC-MS/MS and partial least squares-discriminant analysis to distinguish colon cancer from healthy and polyp tissues. This technology offers high sensitivity and specificity compared to gold standard methods, but without the need for invasive clinical procedures. Additionally, it serves as a platform for further clinical monitoring and studying serum metabolite profiles as surrogate endpoints for response to therapies in colon cancer clinical trials.

What is the Competitive Advantage?

The competitive advantage of this innovation lies in its ability to provide a non-invasive, low-cost diagnostic and monitoring tool for colon cancer patients. It addresses the unmet need for alternative methods to invasive diagnostic procedures, such as colonoscopy. With the colorectal cancer market expected to grow significantly in the coming years, this technology has the potential to make a substantial impact by expanding the range of diagnostic options and facilitating better clinical decision-making.

Patent Information:

[US10274496B2](#)

References

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