A NEW NON-INVASIVE METHOD FOR THE DIAGNOSIS AND PREVENTION OF COLORECTAL CANCER

PATENTED TECHNOLOGY

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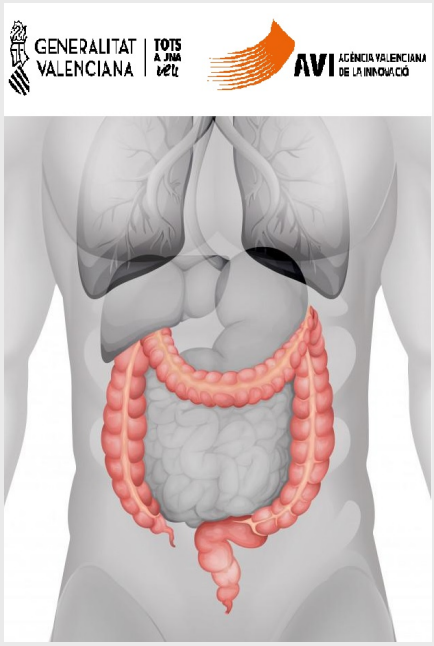
ABSTRACT

The research group "**Atomic - mass spectroscopy and analytical chemistry under extreme conditions**" of the **University of Alicante** has developed a method for the diagnosis and prevention of colorectal cancer (CRC). More specifically, an accurate, simple, sensitive and efficient method of extraction and analysis of volatile organic compounds (VOCs) for application as a non-invasive screening test of CRC by stool analysis has been developed.

This method is non-invasive, fast, reliable, economical, highly sensitive and for use in a wide range of patients, so that it can also eliminate or reduce the number of false positives and false negatives.

The technology is developed at laboratory level and is protected by a patent application.

Companies interested in its commercial exploitation are sought.



TECHNOLOGY ADVANTAGES AND INNOVATIVE ASPECTS

MAIN ADVANTAGES OF THE TECHNOLOGY

The main advantages of the technology described are as follows:

- The device developed allows a **reliable, effective, reproducible and fast** analysis of VOCs (biomarker compounds) in solid and/or semi-solid samples.
- It has good **sensitivity and selectivity**.
- It is a **non-invasive** *ex vivo* diagnostic methodology for CRC.
- Useful for a very **large number of subjects**.
- **Environmentally friendly** use.
- The sorbent used can be reused after a stage after adequate cleaning, which improves its **economic profitability** and its **use at a commercial level**.

INNOVATIVE ASPECTS

The main innovative aspect of the technology is the fact that, until now, 3(4H)-dibenzofuranone had not been identified as a possible biomarker related to CRC or as a biomarker in subjects suffering from CRC.

MARKET APPLICATIONS

The technology described can be used as a method of diagnosis and prevention of CRC. More specifically, this technology is useful to extract and perform accurate, simple, sensitive and effective analysis of VOCs for application as a non-invasive screening test for CRC.

COLLABORATION SOUGHT

Partners sought:

Companies interested in acquiring this technology for **commercial exploitation** through:

- Patent license agreements.
- R&D projects to develop new applications for other types of diagnostics.

Company profile sought:

- **Medical diagnostic laboratories**
- **Analytical instrumentation companies**