New biomarkers for diagnosing cancer

BACKGROUND
Cancer is one of the world's most devastating diseases. Pancreatic cancer, in particular, has become the third leading cause of death in developed countries. A 90% of the diagnosed pancreatic tumors are ductal adenocarcinomas, which is one of the most lethal cancers, with a 5-years survival of less than 10%.

In particular, pancreatic and ovarian cancer are often detected in late, incurable, stages that lead directly to a low survival rate. An early diagnosis would often be the only hope of a successful therapeutic intervention. However, the identification of biomarkers capable of detecting cancer at early stages by sensitive, specific, reliable, practical and cost-effective techniques remains an urgent unmet medical need.

THE TECHNOLOGY

*In vitro* method for diagnosing cancer comprising the steps of:

i. Determining, in a sample obtained from the subject, the concentration of a combination of specific biomarkers.

ii. Comparing the concentration of each of the metabolites determined in (i) with a corresponding reference value.

iii. Diagnosing the patient as having cancer when the concentration of at least one of the metabolites is increased as compared to the corresponding reference value.

Generally, the reference value is, for each metabolite, the concentration of the metabolite determined in the biological sample obtained from a non-oncologic subject or group of patients.

Innovative Aspects:

- Sensitive, specific, reliable, practical and cost-effective method for diagnosing cancer. Moreover, the method may be used for cancer screening, including screening for early stage cancer.
- A blood sample is enough and none biopsied sample is required.
- Several types of cancer can be diagnosed with the presence of the aforementioned metabolic signature.

STATE OF DEVELOPMENT

Clinical validation

INTELLECTUAL PROPERTY

A European patent has been filed (EP22382244), priority date: 14th March 2022

MARKET OPPORTUNITY

Clinical diagnosis sector

RESEARCH TEAM

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KEYWORDS

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