



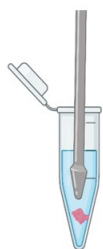
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TITLE

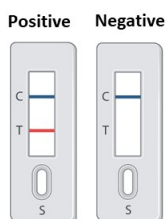
NEW METHOD -

A new easy and fast method to detect celiac disease specific antibodies

1. Mechanical disruption
of biopsy



2. Rapid test to detect
anti-transglutaminase antibodies



3. Results in 15'

Category:

Chemistry

Patent Ownership:

University of Trieste, IRCCS Burlo Garofolo

Inventors:

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Priority Date:

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Patent Application Number:

102021000019616, EP22186201

Patent Status:

Granted in Italy, pending in Europe

Licensing Availability:

Available

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Brief description

The patent describes a new method of manipulating the intestinal biopsy sample to obtain a biological liquid in which to detect intestinal anti-transglutaminase antibodies (anti-ttg). Intestinal anti-ttg are specific of celiac disease (CD) and are particularly useful for making an early diagnosis of the disease in its atypical forms of manifestation that are difficult to identify.

Innovative aspects and main advantages

To date the detection of intestinal anti-ttg is based on too demanding methods that require highly specialized personnel and dedicated instrumentation. Therefore, this marker is available in a few specialized centers. By using this new method any gastroenterology center with a digestive endoscopy unit will be able to detect intestinal anti-ttg and have the result at the end of the endoscopic session.

Applications

The new method will allow a more widespread use of this marker to promptly recognize CD and reduce delay in diagnosis resulting in economic

savings for the healthcare system. Currently, patients with atypical forms of CD have to undergo repeated and invasive tests before receiving the diagnosis. An early diagnosis of CD in children is essential to ensure good health and good growth.

Potential market

The reference market is represented by companies involved in the implementation of products useful for the diagnosis of autoimmune and gastrointestinal diseases such as CD and by hospitals/clinics with gastroenterology centers equipped with a digestive endoscopy unit.

Development status

The patent has so far been validated at the laboratory level with a recently published single-center study (AmJGastroenterol 2023 1;118(4):738). A multicenter study financed with the PNRR call (PNRR-POC-2022-12376280) is currently underway for validation in the reference context (endoscopic room of a gastroenterology center). The current TRL of the technology is 4 and we hope to reach 5 with the implementation of the multicenter study.

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