



**QUESTIONS AND ANSWERS ON THE WITHDRAWAL OF THE MARKETING  
APPLICATION  
for  
GASTROMOTAL**

International non-proprietary name (INN): *1-<sup>13</sup>C-caprylic acid*

On 5 November 2007, INFAL, Institut für biomedizinische Analytik & NMR-Imaging GmbH officially notified the Committee for Medicinal Products for Human Use (CHMP) that it wishes to withdraw its application for a marketing authorisation for Gastromotal, for *in vivo* diagnosis of solid-phase gastric half emptying time in gastric motility disorders.

**What is Gastromotal?**

Gastromotal is a diagnostic test. It was to be available as a syringe containing a liquid for drinking, containing the active substance 1-<sup>13</sup>C-caprylic acid (90 mg).

**What was Gastromotal expected to be used for?**

Gastromotal was expected to be used to diagnose delayed stomach emptying in patients with stomach problems.

**How is Gastromotal expected to work?**

The active substance in Gastromotal, 1-<sup>13</sup>C-caprylic acid, is a natural chemical called caprylic acid that has been labelled with carbon-13 (<sup>13</sup>C). This means that it contains <sup>13</sup>C, a non-radioactive, rare form of the carbon atom, instead of carbon-12 (<sup>12</sup>C), the form that is the most common in nature.

When a patient takes a dose of Gastromotal mixed into a test meal, it enters the stomach with the food. As the food in the stomach is gradually emptied into the gut, it takes the Gastromotal with it, where it is absorbed into the blood and then broken down, releasing carbon dioxide gas labelled with <sup>13</sup>C into the breath. This labelled carbon dioxide can be detected in breath samples taken every 15 to 30 minutes in the four hours after the test meal. The rate of stomach emptying can then be determined by looking at the speed at which labelled carbon dioxide is released in the breath.

**What documentation did the company present to support its application to the CHMP?**

The effects of Gastromotal were first tested in experimental models before being studied in humans. The effectiveness of Gastromotal has been compared with that of a standard test called <sup>99</sup>Tc-scintigraphy (a type of scan using radioactive tracers) in two main studies involving a total of 310 adults. These included healthy volunteers and patients with stomach problems. In both studies, the main measure of effectiveness was how long it took for half of the stomach's solid contents to be emptied.

**How far into the evaluation was the application when it was withdrawn?**

The application was at day 200 when the company withdrew. The CHMP was assessing the responses given by the company to a list of questions.

The CHMP normally takes up to 210 days to evaluate a new application. Based on the review of the initial documentation, the CHMP prepares a list of questions at day 120, which is sent to the company. Once the company has supplied responses to the questions, the CHMP reviews them and may, before giving an opinion, ask any remaining questions at day 180. Following the CHMP's opinion, it usually takes around two months for the European Commission to grant a licence.

**What was the recommendation of the CHMP at that time?**

Based on the review of the data and the company's response to the CHMP list of questions at the time of the withdrawal, the CHMP had some concerns and was of the provisional opinion that Gastromotal could not have been approved for the diagnosis of delayed stomach emptying.

**What were the main concerns of the CHMP?**

The CHMP was concerned that the reliability and usefulness of Gastromotal in diagnosing delayed stomach emptying had not been shown. In the main studies, the level of agreement between Gastromotal and the standard test was too low to be acceptable, resulting in a considerable risk of false positive and false negative results. This could have had an impact on the types of treatment chosen by doctors if they had relied on the test's results.

Therefore, at the time of the withdrawal, the CHMP's view was that a benefit of Gastromotal had not been sufficiently demonstrated and any benefits did not outweigh the identified risks.

**What were the reasons given by the company to withdraw the application?**

The letter from the company notifying the EMEA of the withdrawal of the application is available [here](#)

**What are the consequences of the withdrawal for patients undergoing clinical trials or compassionate use programmes with Gastromotal?**

The company informed the CHMP that there are no consequences for patients currently included in clinical trials or compassionate use programmes with Gastromotal. If you are in a clinical trial or compassionate use programme and need more information about your treatment, contact the doctor who is giving it to you.