Advanced diagnosis for infectious diseases

Serving the European clinical diagnostics market, **Mobidiag** develops solutions to advance the diagnosis of infectious diseases. Sakari Jokiranta, MD, PhD, specialist in clinical microbiology and medical director of United Medix Laboratories – a client of the group – explains what makes its *Helicobacter pylori* and parasite diagnostics solutions so unique.

How long has United Medix Laboratories worked with Mobidiag and how would you describe the relationship?

Sakari Jokiranta: United Medix Laboratories is the biggest private clinical laboratory in Finland, with roots dating back to the 1950s and 1960s. More than half of the turnover comes from private clinics, followed by a 30% share of public healthcare.

We met with a sales representative from Mobidiag in May 2015 and were immediately interested in the results mentioned to us concerning the nucleic-acid-based test of *Helicobacter pylori* from faecal samples. The main reason for the interest was the novel feature of detecting clarithromycin resistance directly from a stool sample without the need for gastroscopy. The test was not yet available for clinical use, but we decided to incorporate it into our laboratory analysis repertoire immediately.

The equipment has enabled us to change the fairly manual qPCR workflow to an automated one.

During those negotiations, we also became interested in participating in the validation of another Amplidiag test developed by Mobidiag, a multiplex PCR-test for detection of intestinal parasites. We participated in that in 2015. On the basis of this history, United Medix Laboratories is primarily a customer, but also, to some extent, a clinical validation test partner for Mobidiag.

What would you say are the benefits of Mobidiag's Helicobacter pylori and parasite diagnostics solutions compared with some of the others on the market?

The test is truly unique; as far as we know, there are no other test kits commercially available for *Helicobacter pylori* clarithromycin resistance analysis from faecal samples.

Clinicians in Finland and abroad have been very interested in sending us samples because of this clear advantage. In Finland, we collected data on treatment failures of *Helicobacter pylori* infections indicating that approximately 30% of patients stay faecal antigen positive in the long term, and quite a few of these patients had been referred to gastroscopy due to treatment failure, according to the local

guidelines. Public healthcare gastroenterologists – plus private practitioners who are well aware of the costs of gastroscopy – have therefore been excited about the availability of the Amplidiag *Helicobacter pylori* test.

For gastrointestinal protozoa, there are several commercially available kits. In late 2015, we used the manual Amplidiag test kits to analyse 115 faecal samples from Ethiopia and over 100 samples from Angola, and compared the results with two commercially available diagnostic PCR kits for intestinal parasites. The performance of the Amplidiag kit was clearly the best and we decided to start to use it as soon as it was given a CE IVD label.

This was in 2016, and we were happy to start the clinical use of the tests for *Helicobacter pylori* and intestinal parasites.

Recently, it was revealed that YML had adopted the Amplidiag Easy line for routine diagnostic screening; how did that work out?

Due to our good experiences with the *Helicobacter pylori* and stool parasite tests, we were encouraged to be one of the first players to bring the Amplidiag Easy automation solution to our laboratory.

One of the reasons we chose the platform was the availability of these two and other clinically useful tests – namely, the bacterial gastroenteritis and the *Clostridium diff.* tests. The equipment has enabled us to change the fairly manual qPCR workflow to an automated one, leading to cost savings and efficient work processes.

We have had great experiences with the equipment itself and have been happy to see the number of samples increasing continuously. We consider the Amplidiag Easy to be one of the key assets of our laboratory in molecular diagnostics of clinically significant microbes.

Does Mobidiag have any further collaborations planned for the near future?

We are preparing to use the Amplidiag Easy in the analysis of several thousands of samples obtained in a large clinical study. This project enables clinical validation of new tests, too.

Further information Mobidiag

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