## Additional information about GastroPanel:

GastroPanel developed by Biohit is a simple blood test for the diagnosis and screening of gastric disorders. GastroPanel test reliably detects *H. pylori* infection and damage or dysfunction of the stomach mucosa (atrophic gastritis), leading to acid-free stomach that is the most important risk factor for gastric cancer. Recent studies suggest that acid-free stomach is also a risk factor for esophageal cancer.

The April 2012 Maastricht IV consensus report of the European Helicobacter Pylori Study Group recommends blood sample biomarker tests as a reliable method to diagnosis of disorders in stomach mucosa and associated risk conditions. Researchers recommend biomarker tests for the diagnosis and follow-up of *Helicobacter pylori* infection and especially due to atrophic gastritis as well as for the screening of asymptomatic patients. (1)

16 gastroenterology experts of the international Healthy Stomach Initiative organization (www.hsinitiative.org) from 12 countries came to the same conclusion that blood biomarker tests are a reliable way to detect and screen for gastric diseases and their risk conditions. Biomarkers in GastroPanel detect reliably *H. pylori* infection and in addition, atrophic gastritis, which is the most important risk condition of gastric cancer. (2)

Microbes from the mouth can colonise an acid-free stomach and produce carcinogenic acetaldehyde from sugar and alcohol. In 2009, IARC (WHO agency on cancer research) classified acetaldehyde from alcoholic beverages (and naturally generated in alcohol) as group I carcinogen, being therefore as carcinogenic as asbestos, formaldehyde and benzene. (3). According to genetic studies this is one of the major risk factors of gastric and oesophageal cancer. The risk can be reduced with the help of another Finnish innovation – OTC product Acetium capsule, which are taken during meals and alcohol consumption, to bind (neutralise) carcinogenic acetaldehyde in the stomach.

GastroPanel provides an opportunity to direct the patients to correct examinations on time. GastroPanel reliably finds those patients whose stomach is "healthy" (patiens do not have *H. pylori* infection or acid-free stomach due to atrophic gastritis. GastroPanel blood test can therefore in most cases replace the expensive and uncomfortable gastroscopy. GastroPanel results significant resource and cost savings in healthcare.

## Literature:

- 1. Malfertheiner P et al. Management of Helicobacter pylori infection--the Maastricht IV/ Florence Consensus Report. http://gut.bmj.com on May 18, 2012. European H. pylori Study Group, ESPSG.
- 2. Agréus L et al. Rationale in diagnosis and screening of atrophic gastritis with stomach-specific plasma biomarkers. Scand J Gastroenterol 2012;47:136-47.
- 3. World Health Organisation WHO, 2009. www.iarc.fr/en/media-centre/pr/2009/pdfs/pr196\_E.pdf