

***H. Pylori + Transferrin
New Launching
Combo Card Rapid Test***



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H. pylori history

- ❑ Human infection with *H. pylori* is very common.
 - + Gram-negative, microaerophilic bacterium that inhabits various areas of the stomach and duodenum.
- ❑ People infected with *H. pylori* almost always develop chronic gastritis (stomach inflammation), frequently without symptoms.
 - + Over 80% of individuals infected with the bacterium are asymptomatic
 - + 2-20% of people infected will develop peptic ulcers
 - + More prevalent in developing countries
- ❑ It causes a chronic low-level inflammation of the stomach lining and is strongly linked to the development of duodenal and gastric ulcers and stomach cancer.
 - + Epidemiology studies have shown that individuals infected with *H. pylori* have an increased risk of gastric adenocarcinoma



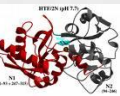
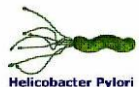
Transferrin history

- ❑ Transferrin is a blood plasma protein that transports **iron** through the blood to the **liver, spleen and bone marrow**.
 - ✚ Glycoprotein highly resistant to bacterial degradation as well as to breakdown by digestive enzymes
 - ✚ Perfect market to be tested in faecal samples
 - ✚ Transferrin may be leaked into gastrointestinal tract during the course of bleeding
- ❑ Transferrin is more stable than Haemoglobin in faeces and can potentially be a more sensitive marker to detect gastrointestinal bleedings, including cancer.
 - ✚ Recent studies identified Transferrin as a potential marker for carcinomas



H. pylori versus Transferrin

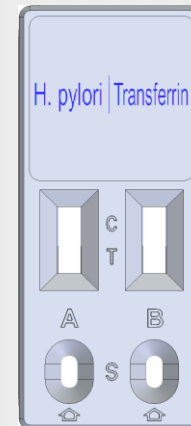
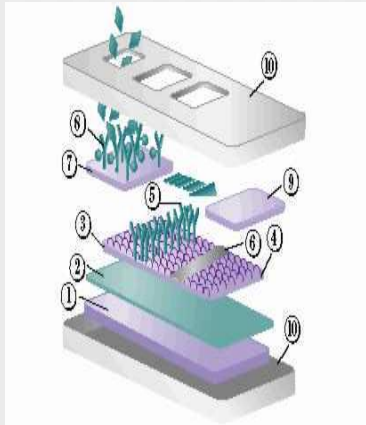
- ❑ **Positive *H. pylori*** means presence of the bacteria, leading or not to gastric ulcer.
- ❑ **Positive Transferrin** means bleeding.
- ❑ **Positive *H. pylori* and Transferrin:** presumably, gastric bleeding ulcer, as Transferrin indicates that the haemorrhage is in the upper part of the digestive tract.





H. pylori + Transferrin rapid test

- ❑ Rapid test for the detection of *H. pylori* and human Transferrin in stool samples.
- ❑ Technique: Immunocromatographic assay.
- ❑ Format: Combo Card.



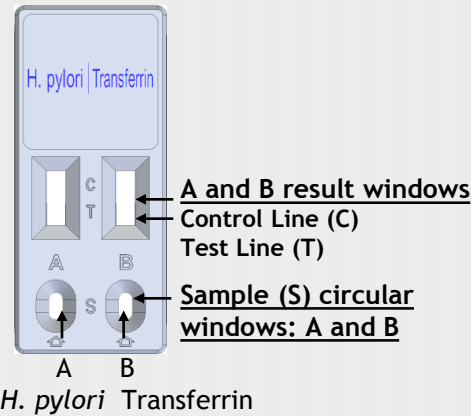


H. pylori+Transferrin test. Why?

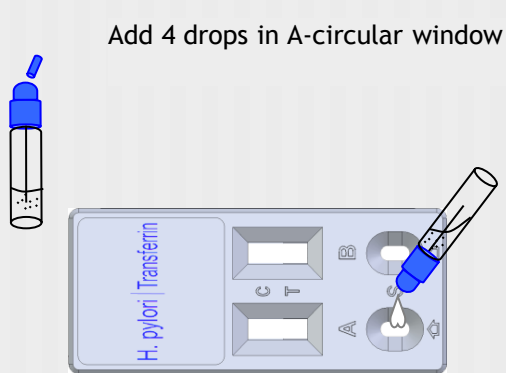
- ❑ Most people infected with *H. pylori* never develops ulcers.
- ❑ *H. pylori* is strongly associated with chronic gastritis and peptic ulcer disease.
- ❑ The detection of faecal Transferrin, very resistant and stable, provides the best alternative way of diagnosing a bleeding disease.
- ❑ Rapid test detecting simultaneously *H. pylori* and Transferrin provides early bleeding ulcer.
 - ✚ No primary need for endoscopy or upper gastrointestinal series.
- ❑ Usefulness of the Certest *H. pylori* + Transferrin test as a presumptive bleeding ulcer diagnosis.



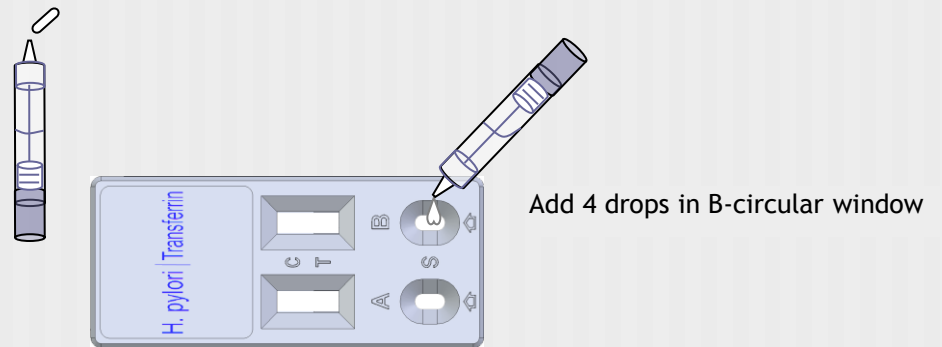
Test performance



Qualitative immunocromatographic assay to determine *H. pylori* and human Transferrin in stool samples.



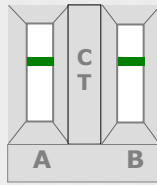
H. pylori strip-A procedure



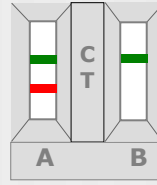
Transferrin strip-B procedure



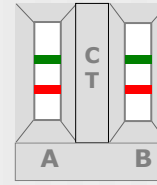
Test results



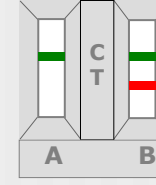
NEGATIVE



POSITIVE/NEGATIVE



POSITIVE/POSITIVE



NEGATIVE/POSITIVE

A <i>H. pylori</i>	B Transferrin	Interpretation of the results
GREEN	GREEN	No infection caused by <i>H. pylori</i> , no gastrointestinal bleeding problem.
GREEN-RED	GREEN	<i>H. pylori</i> infection without presumptive gastrointestinal bleeding.
GREEN-RED	GREEN-RED	<i>H. pylori</i> infection with possibly gastrointestinal bleeding, presumably caused by <i>H. pylori</i> infection.
GREEN	GREEN-RED	No <i>H. pylori</i> infection but presumably gastrointestinal bleeding problem.
Any other result	Any other result	Invalid result. Invalid result either A or B, repeat the assay using the same sample with another combo device.



Conclusions

- ❑ Easy performance and interpretation. 10 minutes result.
 - ✚ Different coloured lines
- ❑ *H. pylori* and Transferrin as perfect markers for gastrointestinal bleeding.
 - ✚ Many cases of peptic ulcer disease are associated with *H. pylori*
 - ✚ Infection with *H. pylori* is believed to be the cause of most stomach cancer
- ❑ Excellent specificity value. Specific ***mouse monoclonal antibodies***.
 - ✚ no cross-reaction



¡¡*Thanks for your
attention!!*

