

UBT “GOLD-STANDARD” test for diagnosis of H. pylori infection

About Headway

Shenzhen Zhonghe Headway Bio-Sci & Tech Co., Ltd., a subsidiary of China Isotope & Radiation Corporation, is the founder of the breath testing industry in China. We are the leading supplier of ¹³C and ¹⁴C Urea Breath Test kits and analysis equipments for the in-vitro diagnosis of Helicobacter pylori infection. We've been engaged in the research and development of non-invasive breath test methods since our foundation in 1996. Now, we are offering reliable products and excellent service to over 8000 clients throughout the world.

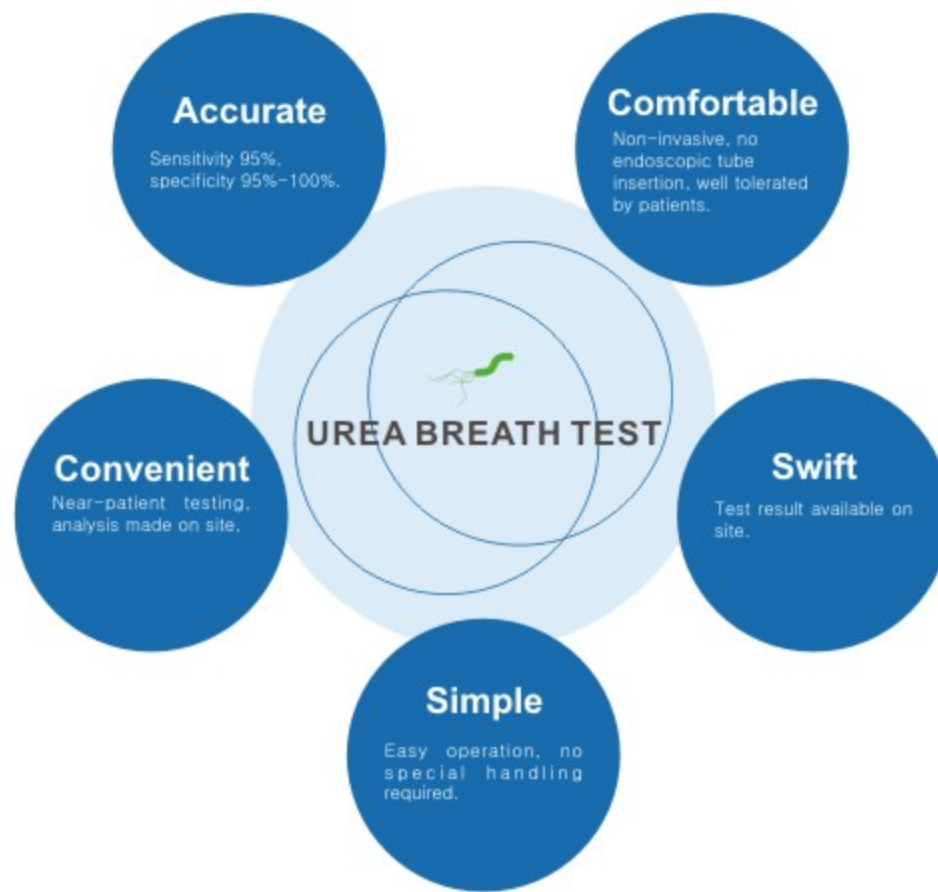
What is Helicobacter Pylori?

Helicobacter Pylori (H. pylori) was first discovered in 1982 by Australian scientists Barry Marshall and Robin Warren. It is a Gram-negative, microaerophilic bacterium in the stomach.

H. pylori is the primary cause of gastritis, peptic ulcer disease and MALT. WHO identified H. pylori as Class I carcinogen of gastric cancer. More than 50% of the world's population harbor H. pylori in their upper gastrointestinal tract.

Why choose UBT?

Urea Breath Test provides a non-invasive, accurate and simple diagnostic technology for the detection of H. pylori. It is a method of choice for diagnosing active H. pylori infection and for monitoring the therapeutic effect of H. pylori eradication.

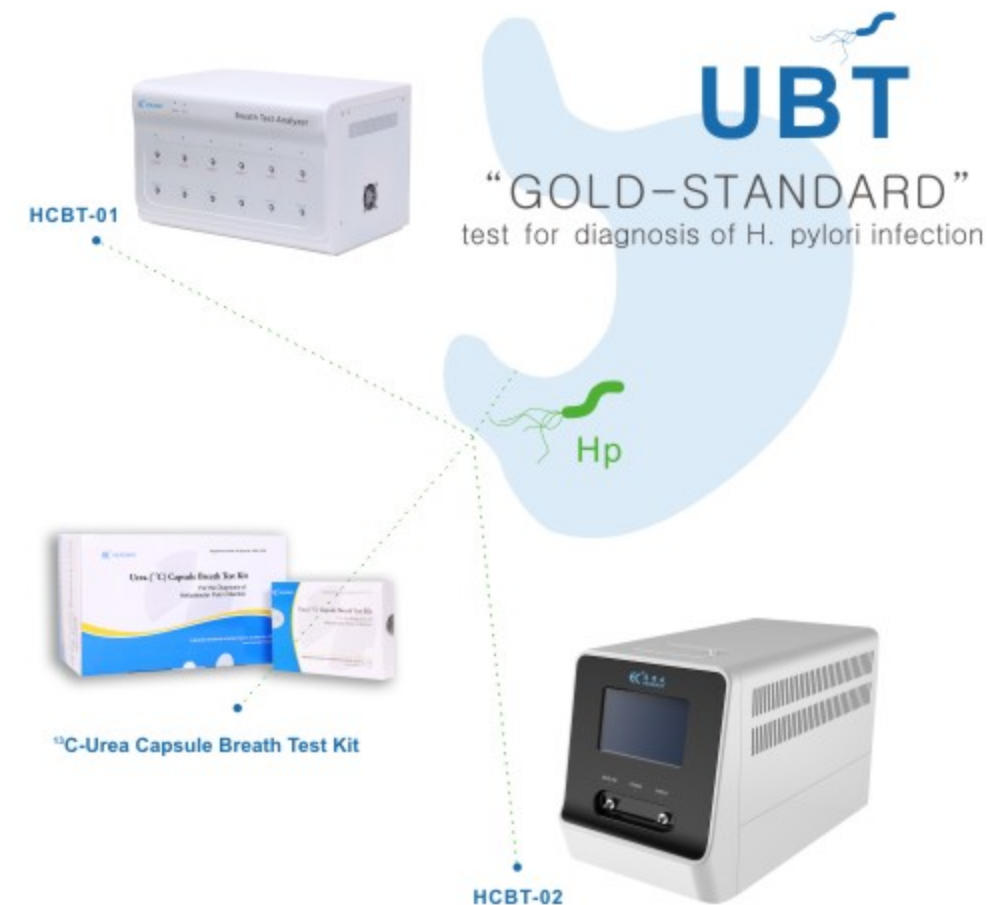


SHENZHEN ZHONGHE HEADWAY BIO-SCI & TECH CO., LTD.

Add: 6/F, Building R1-B, South District, High-Tech Industrial Park, Shennan Road, Shenzhen, 518057, China
Tel: 86-755-26619490 Fax: 86-755-26617554
Email: marketing@headwaychina.com
www.headwaychina.com



Since 1996
Once Breathed, H. Pylori Detected!



Global Urea Breath Test Expert

Common Testing Methods for Helicobacter Pylori Infection

Test method	Urea Breath Test	Serology (ELISA)	Stool (HpSA)	Endoscopy
Sample collection	Breath Sample	Blood Sample	Stool Sample	Tissue Sample
Tests for active infection	YES	NO	YES	YES
Scope of test	Tests the entire gastric mucosa for active H.Pylori infection	Tests the immune system for prior exposure	Tests for H.Pylori antigens in stool	Tests small areas of the stomach
Post-treatment monitoring	YES	NO	YES	YES

¹³C - Urea Breath Test

Breath Test Analyzer

HCBT-01

Rapid measurement, 2-3 minutes for one test
12 ports for high-throughput analysis
High accuracy and good repeatability
User-friendly software with HIS/LIS connection



HCBT-02

Easy operation via touch screen
High accuracy and good repeatability
User-friendly software with HIS/LIS connection
Test data storage and export
Automatic result printing



¹³C-Urea Capsule Breath Test Kit



Non-invasive, accurate, simple, swift

Specification

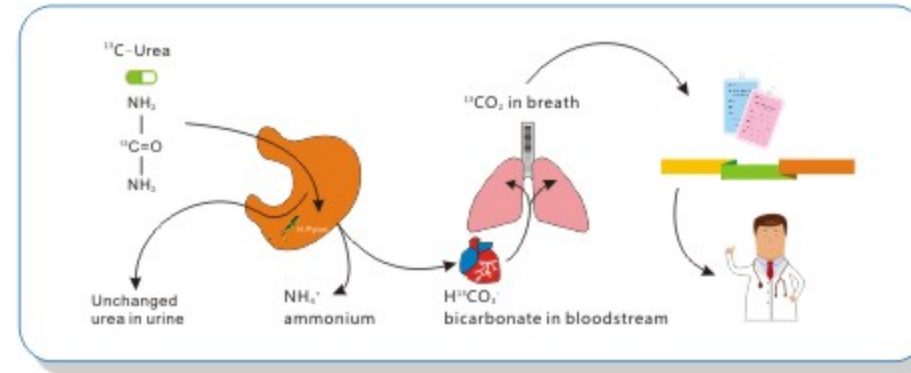
- ¹³C-Urea capsule: 20 grains/package or 1 grain/package
- Breath bag: 40 pcs/package or 2 pcs/package

13C UREA BREATH TEST

Operation Procedure of ¹³C - Urea Breath Test



Principle of ¹³C-Urea Breath Test



- Patient swallows urea capsule labeled with ¹³C.
- If the patient is infected with H. pylori, orally administered ¹³C-Urea will be hydrolyzed into ammonia and ¹³CO₂. ($^{13}\text{CON}_2\text{H}_4 + \text{H}_2\text{O} \rightarrow 2\text{NH}_3 + ^{13}\text{CO}_2$)
- ¹³CO₂ is absorbed into the blood circulation and exhaled by the lung.
- Collect the pre-dose and post-dose exhale breath and analyze the variation of ¹³C/¹²C ratio in exhaled CO₂ to diagnose the infection of H. pylori.

Applications of ¹³C-Urea Breath Test

- Dyspepsia initial diagnosis, post treatment follow-up of H. pylori infection;
- The patients need eradicate H. pylori, who suffers Gastric ulcer, duodenum ulcer, chronic active gastritis, antral gastritis or Gastric mucosa associated lymphoid tissue malignant tumor diseases;
- Precaution of gastric cancer or the ones with family history of gastric cancer;
- Refuser of gastroscopy;
- Long term user of NSAID (Non-steroidal anti-inflammatory drugs);
- Iron-deficiency anemia with unknown causes;
- Idiopathic thrombocytopenic purpura (ITP);
- Patients already take endoscopy;
- Physical examination;
- Patient wishes.

