



**EsoGuard<sup>®</sup>**  
esophageal DNA test

## DNA screening for precursors of esophageal cancer



### **Detect altered DNA**

With over 90% sensitivity and specificity at detecting BE and EAC, the EsoGuard esophageal DNA test allows detection of these conditions in a simple office-based procedure without endoscopy.<sup>1</sup>

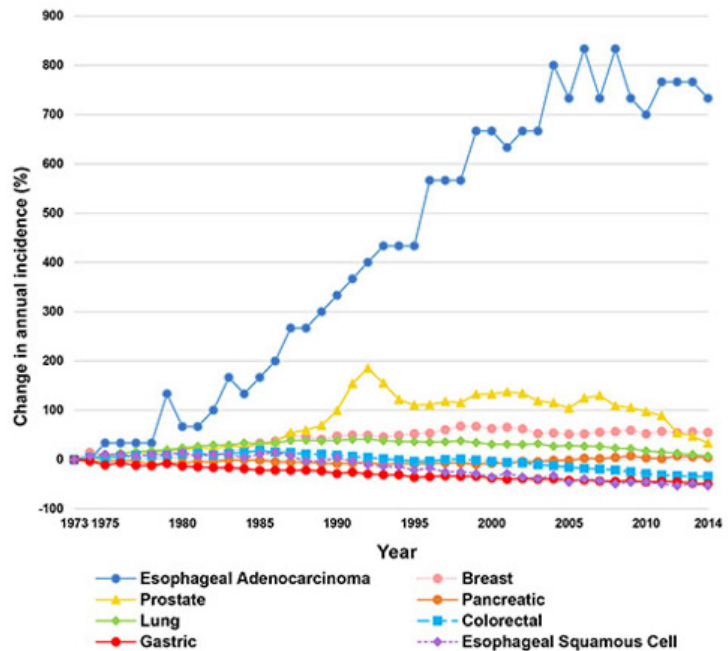
Barrett's Esophagus screening rates are very low — even for the high-risk patients

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**Over 90%**  
of Esophageal  
Adenocarcinoma  
patients never knew  
they had treatable  
Barrett's Esophagus<sup>2</sup>

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**Esophageal Adenocarcinoma  
has increased over 733% in  
the past 4 decades<sup>3</sup>**



**Less than 10%**  
of high-risk GERD patients currently  
undergo EGD screening<sup>4</sup>

Multiple factors contribute to the low BE screening rate, even in high-risk patients, including limited patient awareness of the relationship between GERD and EAC and guidelines recommending BE screening as well as reluctance to refer patients, whose symptoms may be reasonably controlled on PPIs for an “invasive” endoscopic procedure.



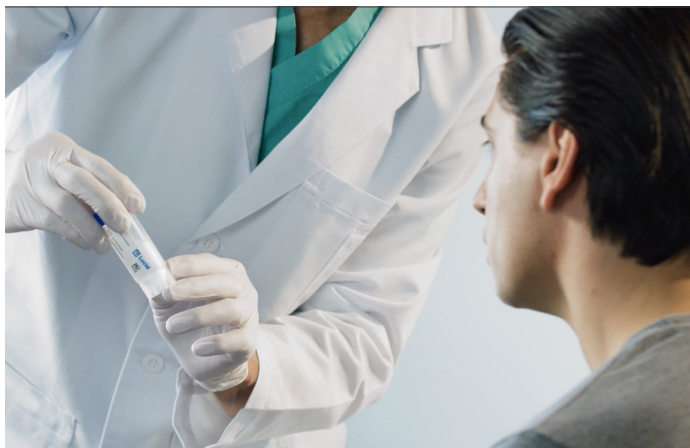
**~40% of EAC patients  
were asymptomatic prior  
to diagnosis<sup>5</sup>**

**Lethal Cancer**

**~80% of EAC patients die  
within 5 years of diagnosis<sup>6</sup>**

# Find Barrett's *before* it progresses

**EsoGuard esophageal DNA test is a highly accurate test that detects altered DNA to help diagnose precursors of esophageal cancer.**



EsoGuard is a laboratory developed test that has demonstrated over 90% specificity and 90% sensitivity in diagnosing Barrett's Esophagus.<sup>1</sup>

The assay uses next generation sequencing (NGS) to examine individual DNA molecules for the presence or absence of cytosine methylation at 31 different genomic locations.

## 408

**patient human study**

published in  
Science Translational Medicine<sup>1</sup>

## >90%

**sensitivity & specificity**

at detecting BE, with and without dysplasia,  
as well as esophageal adenocarcinoma<sup>1</sup>

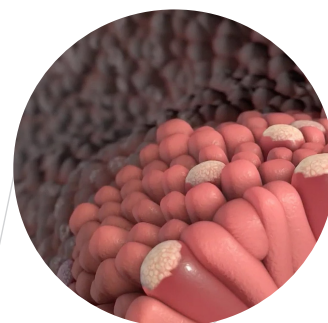
## EsoGuard analyzes methylation at 31 sites on 2 genes

EsoGuard assesses the presence of methylation in targeted regions of the Vimentin and CCNA1 genes after the samples have undergone bisulfite conversion—a chemical step which allows characterization of DNA methylation at CpG sites.

EsoGuard is used to detect non-dysplastic BE including short segment and long segment, dysplastic BE, including both low and high grade forms, adenocarcinoma of the esophagus including intramucosal disease, and adenocarcinoma of the gastroesophageal junction.

**Know before you scope —**  
distal esophageal cells can be collected  
in a simple office-based procedure

**The assay provides a binary report which  
means a clear result without pathology**





## Who should be considered for screening?

The American College of Gastroenterology and the American Gastroenterological Association recommend nonendoscopic screening in patients with multiple established risk factors:<sup>7,8</sup>

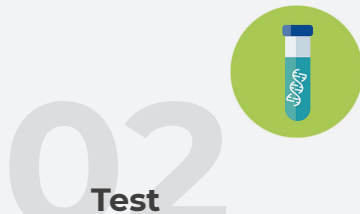
- Individuals with chronic GERD symptoms
- Male
- >50 years old
- White Race
- Tobacco smoking
- Obesity
- Family History of BE or EAC in a first-degree relative

## How it works



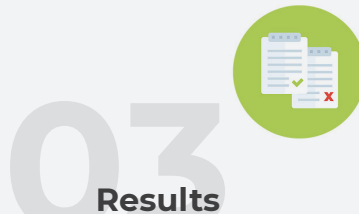
### Cell Collection

Distal esophageal cells are sampled in a simple office-based procedure and sent to our laboratory.



### Test

The EsoGuard Esophageal DNA Test assesses signature epigenetic changes indicative of BE and EAC using advanced molecular diagnostic techniques.



### Results

The physician receives a report with a positive or negative result indicating whether or not epigenetic changes consistent with BE/EAC were detected.

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#### REFERENCES:

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2021 Diagnostics  
Innovation of the Year