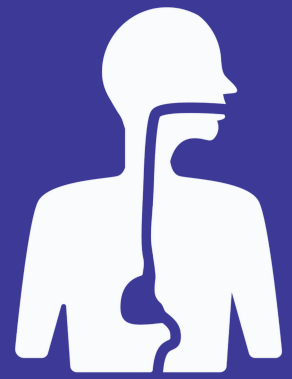


# Diagnose and Treat Earlier

## Comprehensive Barrett's Esophagus Test (CBEST™)



### Improving the Detection of Dysplasia and Adenocarcinoma

Because patients with Barrett's esophagus (BE) are at an increased risk for esophageal adenocarcinoma (EAC), early detection and surveillance are key to optimized patient management and improved patient outcomes.<sup>1</sup> However, accurately identifying and grading the varying degrees of dysplasia, particularly low grade, can be difficult using traditional testing methods.

### An Innovative Solution for More Informed Treatment Decisions

- The Comprehensive Barrett's Esophagus Test (CBEST™) is unique combination of cytology, immunohistochemistry (IHC), and fluorescence in situ hybridization (FISH)
- Differentiates between low-grade dysplasia and high-grade dysplasia
- Shown to increase the detection of low-grade dysplasia by 43% compared to histopathology only<sup>2</sup>
- Aids in the prediction of response to photodynamic therapy<sup>3</sup>
- CBEST™ is performed on easy-to-collect esophageal brushing samples\*

### Brush Cytology Advantages



More comprehensive sampling of the esophagus compared to biopsy or cytology balloon<sup>1</sup>

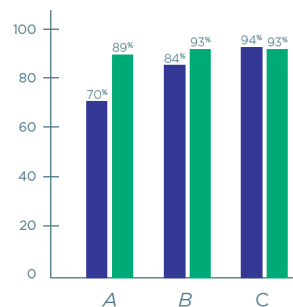


Less procedure time compared to four quadrant biopsy technique<sup>1</sup>

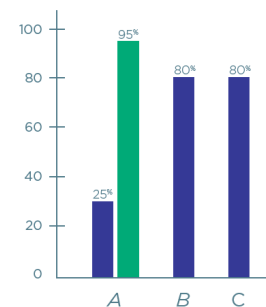


Less invasive for patient

SENSITIVITY AND SPECIFICITY USING BRUSH CYTOLOGY WITH FISH<sup>1</sup>



SENSITIVITY AND SPECIFICITY USING BALLOON CYTOLOGY<sup>4</sup>



KEY

A - Low-grade Dysplasia

B - High-grade Dysplasia

C - Adenocarcinoma

■ - Sensitivity

■ - Specificity

\*Preferred collection method is esophageal brushing. Please inquire for additional information on CBEST for tissue

# Comprehensive Barrett's Esophagus Test (CBEST™)

## Test Details

The CBEST™ panel of biomarkers have known associations with dysplastic changes of Barrett's esophagus. This multi-omics test provides an indication of progress to support treatment options.<sup>3,5-9</sup>

- **Cytology** - Imparts a characteristic range of coloration to exfoliative cells, allowing critical examination of nuclei and cytoplasmic components.
- **AMACR (P504S)** - The concentration and activity of this protein has recently been identified in detecting dysplasia in ulcerative colitis, Crohn's disease, and Barrett's esophagus.
- **p53†** - The study of p53 expression by IHC is of interest in Barrett's esophagus patients with a diagnosis of indefinite for dysplasia or low-grade dysplasia.
- **Ki-67†** - IHC staining for MIB-1, the Ki-67 proliferation antigen, appears gradually and is an important marker for cell proliferation.
- **ABPH 2.5** - Stains the acidic mucin present in goblet cells.
- **Feulgen Stain** - Used for the quantification of chromosomal material or DNA with sufficient resolution to detect the gain or loss of a single large chromosome.
- **FISH** - Four-probe panel to detect gains and losses of MYC (8q24), p16 (CDKN2A at 9p21), HER2 (ERBB2 at 17q12), and ZNF217 (20q13) associated with higher-risk disease.

## Also Available

Traditional FISH and CBEST™ for tissue specimens.† Please inquire for additional information.

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## INNOVATION, EXPERIENCE, AND SOLUTIONS YOU CAN TRUST

- Industry leading diagnostic solutions
- Expert board-certified pathology staff
- Partnership opportunities (TC/PC)

### References:

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†Indicates biomarkers included in CBEST™ for tissue specimens