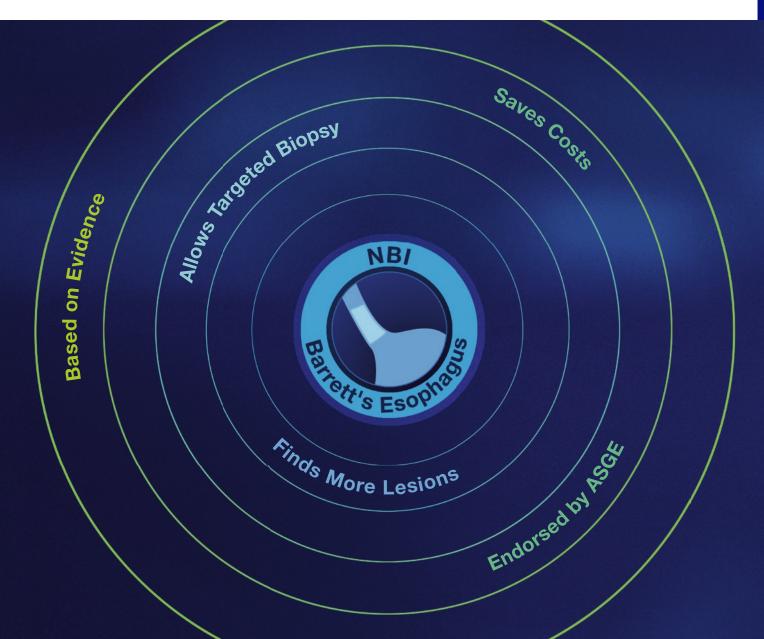


# Narrow Band Imaging

Making Waves in Barrett's Esophagus Surveillance



## Narrow Band Imaging (NBI) in the Surveillance of Barrett's Esophagus

#### A New Standard for Endoscopy

#### **Better Clinical Outcomes at Reduced Cost**

- Facts · Approximately 1-5% of the population in Western countries have Barrett's Esophagus.<sup>1</sup> • Patients with Barrett's Esophagus are known to have a 30- to 60-fold risk of developing esophageal adenocarcinoma.<sup>2</sup>
- **Challenge** The current standard of care requires 4-quadrant random biopsies every 2 cm repeated every half to one year in high-risk patients.<sup>3</sup>
  - Random biopsies miss up to 50% of dysplastic lesions and create considerable cost due to low diagnostic efficiency.4,5
- Solution · As reported by Sharma et al., NBI enables clearer identification of areas suspicious for dysplasia and thus guides biopsy.<sup>5</sup>
  - · A targeted biopsy protocol could be more cost-effective due to a reduced amount of samples taken whilst safeguarding clinical outcomes.<sup>6</sup>

## Proven Clinical Outcomes for NBI Guided Targeted Biopsy in Barrett's Esophagus Surveillance versus Random Biopsy

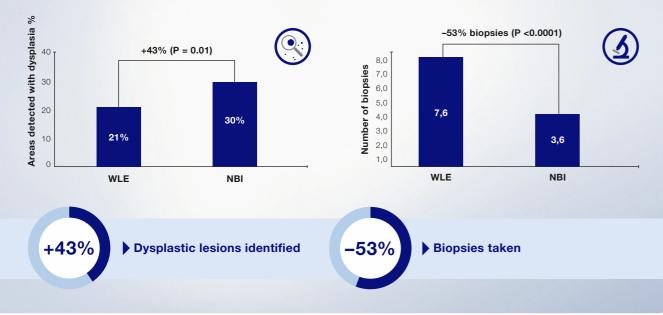
#### **Increases Detection with Fewer Biopsies**

In a randomized controlled trial involving 123 patients, NBI targeted biopsy identified 43% more dysplastic areas compared to white-light random biopsy whilst requiring 53% less biopsies.7

#### **NBI Fulfills PIVI Criteria**

In a recent meta analysis, ASGE endorsed the use of NBI targeted biopsy to replace random biopsies if applied by experienced clinicians using advanced endoscopic technology.8

#### Outcome Comparison of WLE Random Biopsy (RB) vs. NBI Targeted Biopsy (NBI)





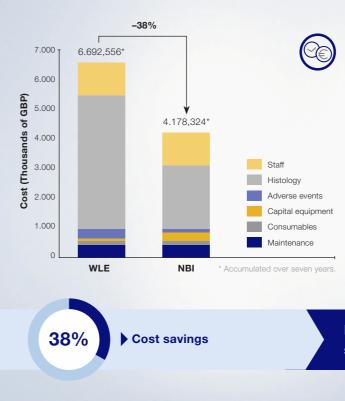
Improves procedural efficiency by avoiding unnecessary biopsies and related administrative work of endoscopy nurses incl. sample labeling and documentation.



Less risk of missing dysplasia thanks to better visibility and thus higher per-lesion sensitivity.7

### **NBI Targeted Biopsy Provides Substantial Cost Savings**

Difference in Annual Costs for a Typical Barrett's Reference Center in the United Kingdom





Eliminates unnecessary biopsies for histopathology testing.6

The application of NBI can, therefore, substantially contribute to better clinical outcomes and reduced cost of Barrett's **Esophagus surveillance.** 

An economic analysis of the adoption of NBI targeted biopsy for the UK found:6

- Estimated cost savings of >GBP 350,000 per year for initial diagnosis and surveillance of 649 patients (a reduction of 38% vs. WLE Random Biopsy).
- · Cost savings were driven by the reduction of histological tests (about GBP 290 per patient).
- Estimated total per-patient cost savings were approximately GBP 300 despite additional investments in HDTV gastroscopes.

NBI targeted biopsies save costs and safeguard clinical outcomes