



# How WATS<sup>3D</sup> overcomes the limitations of the Seattle Protocol in Barrett's esophagus and dysplasia diagnoses

## There is a lack of utility and confidence in the Seattle protocol



An **estimated 33%** of esophageal adenocarcinomas were diagnosed within 1 year of negative index endoscopy.<sup>1</sup>

The NEW ENGLAND JOURNAL of MEDICINE

David A. Johnson, MD reviewing Visrodia K, et al. Gastroenterology, 2016.



There is **no significant mortality reduction** from Seattle protocol surveillance in Barrett's esophagus patients.<sup>2</sup>

aga American Gastroenterological Association

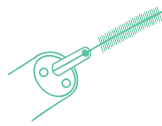
Corley DA, et al. Gastroenterology, 2013.

## WATS<sup>3D</sup> OFFERS AN INNOVATIVE 3-IN-1 DIAGNOSTIC SOLUTION

that helps physicians overcome current limitations



Click or scan to see how WATS<sup>3D</sup> works



**Enhanced wide-area tissue sampling** reduces sampling error<sup>3,4</sup>



**3D imaging with AI-powered analysis** improves diagnostic efficacy<sup>3,4</sup>



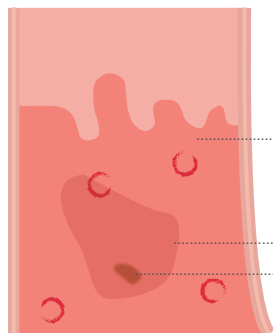
**Team of expert GI pathologists** provides diagnostic precision<sup>3,4</sup>

## WATS<sup>3D</sup> enhanced tissue sampling is key to reducing sampling error<sup>4-6</sup>

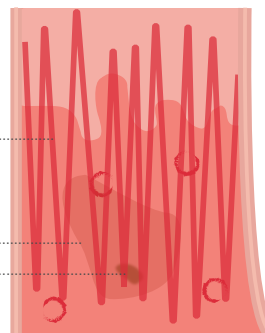
### Forceps

LIMITED SURFACE SAMPLED

Forceps biopsy has a significant potential for sampling error



VS



### WATS<sup>3D</sup> + Forceps

EXTENSIVE SURFACE SAMPLED

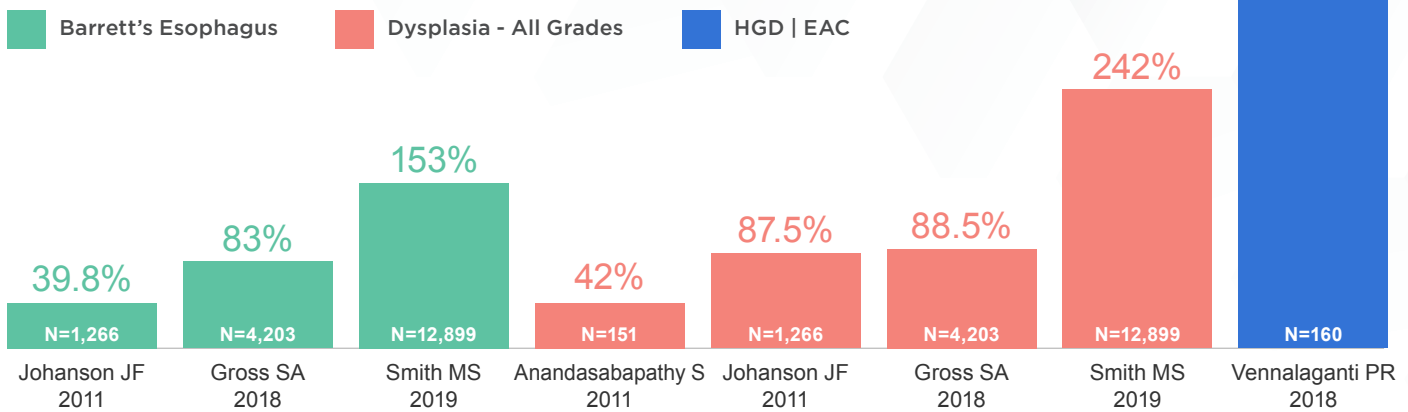
The wider surface area sampled by WATS<sup>3D</sup> addresses this problem

BE=Barrett's esophagus; HGD=high-grade dysplasia; LGD=low-grade dysplasia.



## WATS<sup>3D</sup> has demonstrated significant clinical results<sup>5-9</sup>

### Added diagnostic yield of WATS<sup>3D</sup> as an adjunct to forceps biopsy



### WATS<sup>3D</sup> increased detection of<sup>5,8</sup>

BARRETT'S ESOPHAGUS  
by  
**~1.5X**

DYSPLASIA - ALL GRADES  
by  
**~2.4X**

HGD | EAC  
by  
**~4.2X**



### WATS<sup>3D</sup> is included in the ASGE Standards of Practice Guidelines on the screening and surveillance of Barrett's esophagus

ASGE Practice Guidelines **suggest using WATS<sup>3D</sup> for known or suspected Barrett's esophagus** in addition to WLE with Seattle protocol biopsy sampling compared with WLE with Seattle protocol biopsy sampling alone.<sup>10</sup>

[www.WATS3D.COM](http://www.WATS3D.COM)



**866-3636-CDX**

**References:** 1. Johnson DA. High rate of missed esophageal adenocarcinoma in Barrett esophagus. NEJM Journal Watch Gastroenterology, March 14, 2016. <https://www.jwatch.org/na40738/2016/03/14/high-rate-missed-esophageal-adenocarcinoma-barrett>. Accessed September 7, 2021. 2. Corley DA, Mehtani K, Quesenberry C, Zhao W, de Boer J, Weiss NS. Impact of endoscopic surveillance on mortality from Barrett's esophagus-associated esophageal adenocarcinomas. Gastroenterology. 2013;145(2):312-9.e1. 3. Vennalaganti PR, Kanakadandi VN, Gross SA, et al. Inter-observer agreement among pathologists using wide-area transepithelial sampling with computer-assisted analysis in patients with Barrett's esophagus. Am J Gastroenterol. 2015;110(9):1257-1260. 4. Singer ME, Smith MS. Wide area transepithelial sampling with computer-assisted analysis (WATS<sup>3D</sup>) is cost-effective in Barrett's esophagus screening. Dig Dis Sci. 2021;66(5):1572-1579. 5. Vennalaganti PR, Kaul V, Wang KK, et al. Increased detection of Barrett's esophagus-associated neoplasia using wide-area trans-epithelial sampling: a multicenter, prospective, randomized trial. Gastrointest Endosc. 2018;87(2):348-355. 6. Gross SA, Smith MS, Kaul V; US Collaborative WATS<sup>3D</sup> Study Group. Increased detection of Barrett's esophagus and esophageal dysplasia with adjunctive use of wide-area transepithelial sample with three-dimensional computer-assisted analysis (WATS). United European Gastroenterol J. 2018;6(4):529-535. 7. Johanson JF, Frakes J, Eisen D; EndoCDx Collaborative Group. Computer-assisted analysis of abrasive transepithelial brush biopsies increases the effectiveness of esophageal screening: a multicenter prospective clinical trial by the EndoCDx Collaborative Group. Dig Dis Sci. 2011;56(3):767-772. 8. Smith MS, Ikonomi E, Bhuta R, et al; US Collaborative WATS Study Group. Wide-area transepithelial sampling with computer-assisted 3-dimensional analysis (WATS) markedly improves detection of esophageal dysplasia and Barrett's esophagus: analysis from a prospective multicenter community-based study. Dis Esophagus. 2019;32(3):doy099. 9. Anandasabapathy S, Sontag S, Graham DY, et al. Computer-assisted brush-biopsy analysis for the detection of dysplasia in a high-risk Barrett's esophagus surveillance population. Dig Dis Sci. 2011;56(3):761-766. 10. ASGE Standards of Practice Committee, Qumseya B, Sultan S, Bain P, et al. ASGE guideline on screening and surveillance of Barrett's esophagus. Gastrointest Endosc. 2019;90(3):335-359.e2.