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NCCN Guideline Panel: Esophageal and Esophagogastric Junction Cancers

On behalf of CDx Diagnostics, Inc., I respectfully request that the NCCN Esophageal and Esophagogastric Junction Cancers Guideline Panel review the referenced professional society guidelines and scientific data regarding Wide Area Transepithelial Sampling with Computer-Assisted Three Dimensional Tissue Analysis (WATS^{3D}) for inclusion in its guidelines. WATS^{3D} is indicated as a routine adjunct to the “Seattle” random biopsy sampling protocol for patients undergoing screening or surveillance endoscopy for suspected or known Barrett’s esophagus (BE).

Specific Changes: In all relevant NCCN Guideline sections that outline diagnostic work-ups to detect Barrett’s esophagus and associated dysplasia in patients undergoing endoscopic screening or surveillance, we request that Wide Area Transepithelial Sampling with Computer-Assisted Three Dimensional Tissue Analysis (WATS^{3D}) be included as an adjunct to the Seattle random forceps biopsy protocol.

FDA Clearance: The FDA has determined that the type of cytology brush provided by CDx to clinicians to obtain the WATS sample, and the three dimensional computer-assisted tissue analysis of the WATS sample that is performed at the pathology laboratory, do not require FDA pre-market approval or clearance.

Rationale: The most current edition of the official “Guideline on Screening and Surveillance of Barrett's Esophagus” by Qumseya et al on behalf of the Standards of Practice Committee of the American Society for Gastrointestinal Endoscopy (ASGE) (1), includes adjunctive use of WATS^{3D} for the screening and surveillance of Barrett’s esophagus. This most recent Standard of Practice Guideline for Barrett’s Esophagus was “based on systematic reviews of the evidence using the Grading of Recommendations, Assessment, Development and Evaluation methodology [and complied with] the standards for guideline development set forth by the Institute of Medicine for the creation of trustworthy guidelines ... to help clinicians understand the published literature and the quality of available data with the ultimate goal of optimizing care for patients.” Based upon these evidence-based clinical practice guidelines regarding screening and surveillance for BE the ASGE recommends: “In patients with known or suspected BE, we suggest using WATS3D in addition to Seattle protocol biopsy sampling compared with white-light endoscopy with Seattle protocol biopsy sampling alone” (1).

The following articles are submitted in support of this proposed change.

1. Qumseya B MD, Sultan S, Bain P, et al. ASGE guideline on screening and surveillance of Barrett’s esophagus. *Gastrointest Endosc.* 2019; 90(3):335-59
2. Johanson JF, Frakes J, Eisen D. 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;56:767-72.

3. 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;56:761-6.
4. Vennalaganti, P.R., et al., Increased detection of Barrett's esophagus-associated neoplasia using Wide-Area Trans-epithelial Sampling: A multicenter, prospective, randomized trial. *Gastrointest Endosc*, 2018 Feb;87(2):348-355.
5. Gross SA, Smith MS, Kaul V. 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 May;6(4):529-535.
6. Smith MS, Ikononi E, Bhuta R, et al. 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
7. Vennalaganti PR, Naag Kanakadandi V, 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;110:1257-60.

Sincerely,



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