BACKGROUND: "Resect and discard" (RD) is a new paradigm for management of diminutive polyps.

AIM: To compare concordance of surveillance interval recommendations and diagnostic performance between RD and standard of care in a hospital outpatient department with both academic and community gastroenterologists.

METHODS: Prospective, observational study conducted at a single outpatient endoscopy center over 12 months. Patients with diminutive polyps on screening or surveillance colonoscopy were included. Histology predictions for all diminutive polyps (≤5 mm) were made based on endoscopic imaging. Concordance of recommended surveillance intervals and diagnostic performance of histology predictions were compared to histopathological review.

RESULTS: A total of 606 diminutive polyps were found in 315 patients (mean age 62.4 years, 49 % female). Histological prediction was made in 95.7 % of polyps (97.4 % of patients), with high confidence in 74.3 %. The concordance for surveillance intervals was 82.1 % compared to histopathological review and was similar between community and academic gastroenterologists (80.2 vs. 76.3 %, p = 0.38). Overall, sensitivity, specificity, and accuracy of histological predictions made with high confidence were 0.81, 0.36, and 77.1 %. Predictions made with narrow-band imaging (NBI) had lower accuracy (73.9 % with NBI vs. 82.5 % with high-definition white light (HWDL) only, p = 0.017) as well as lower prediction confidence (score of 7.6 with NBI vs. 8.6 with HDWL only, p < 0.001).

CONCLUSIONS: Our surveillance interval concordance was below the 90 % threshold deemed acceptable by the ASGE Preservation and Incorporation of Valuable Endoscopic Innovations statement. Diagnostic performance using optical imaging to predict histology was equal between community and academic endoscopists.