Introduction Colorectal polyps with overt endoscopic features of invasive cancer are referred for surgery. However, polyps without overt features might still harbour cancer. We aim to identify incidence of such covert cancers in colorectal polyps to see if the ‘resect and discard’ strategy can be extended to colorectal lesions ≤0 mm in size.

Methods We analysed outcomes of all patients who were colonoscoped by 5 expert (BCSP) endoscopists between January 2007 to December 2018 and were found to have polyps. Data was prospectively collected on an online endoscopy reporting system and pathology reporting system. A chart review was then carried out analysing the site, size, morphology and histological diagnoses of each polyp.

Results A total of 15906 polyps were removed at colonoscopy over the specified period. Mean size was 7.3 mm (range: 1 to 120 mm). 86.6% of all polyps were non pedunculated and 56.3% polyps were located in the left colon and rectum. The size, site, morphology and histology of these polyps is shown in table 1.

A histopathological diagnosis of polyp cancer was made in 104/15906 polyps (0.65%). 94/104 polyp cancers (90.25%) were associated with non pedunculated morphology [OR 1.45, 95%CI 0.7–7.8].

No cancer was found in polyps < 5 mm in size. However, the cancer incidence was 4/2365 (0.17%) in polyps ≤0 mm, 58/1793 (3.25%), in polyps 1–0 mm and 42/973 (4.30%) in polyps > 30 mm in size.

89 cancers were found in the left colon and rectum compared with 15 cancers in the right colon (85.5% vs 14.5%) [OR 4.31, 95% CI 2.7–7.2]. All 4 cancers found in the 0–mm category were non-pedunculated polyps in left colon.

Conclusion We have demonstrated that the prevalence of covert cancer in colorectal lesions ≤5 mm is negligible and that of polyps ≤0 mm is very low (0.17%). All these cancers were in non-pedunculated polyps in left colon. This will be a very important information in consideration of Resect & Discard strategy for polyps ≤0 mm in size.

Cancer risk, however, increased more than 20 fold in polyps > 3 cm (3.6%) [OR 21, 95% CI 7.8–8.15] p<0.0001. Based on the above data, we can conclude that the ‘resect and discard’ strategy can be extended to colorectal lesions ≤0 mm in size.

Conclusions This study demonstrates that the prevalence of covert cancer in colorectal lesions between ≤0–0 mm is very low. Cancer risk, however, increased more than 20 fold in polyps greater than 1 cm (3.6%) [OR 21, 95% CI 7.8–8.15] p<0.0001. Based on the above data, we can conclude that the ‘resect and discard’ strategy can be extended to colorectal lesions ≤0 mm in size.