# A guide to Polypectomy and Local Resections of the Colorectum Histopathology Reporting



Includes the ICA International Collaboration on Cancer reporting dataset denoted by \*

| Clinic               | al details   |  | Microscopic findings |   |  |  |
|----------------------|--|--|----------------------|---|--|--|
| <u>\$1.02</u>        | *Clinical info. on request form<br>(complete as narrative or use the<br>structured format)   | See p2   | <u>\$3.01</u>        | Additional features<br>Mitotic count  | See p2<br>Not applicable<br>/2 mm²<br>AND/OR |  |
| <u>G1.01</u>         | Copy to doctor   | Text   |                      | Ki-67 proliferation index   | %  |  |
| <u>S1.03</u>         | Pathology accession number   | Text   | <u>\$3.02</u>        | ~ -   | Cannot be                                    |  |
| <u>S1.04</u>         | Principal clinician  | Text   |                      | (Record for each polyp or fragments per location recorded in S3.01.If present, record   | assessed<br>Absent                           |  |
| <u>G1.02</u>         | Other clinical information   | Text   |                      | the grade of dysplasia. If sessile serrated adenoma with dysplasia (SSLD) selected in   | Present                                      |  |
| Macroscopic findings |  |  |                      | S3.01, S3.02 is not required.)  | Low grada                                    |  |
| <u>S2.01</u>         | *Clinical information  | See p2   |                      | Grade of dysplasia (This should be recorded for each polyp  | Low grade<br>High grade<br>Not specified     |  |
| <u>S2.02</u>         | *Endoscopic procedure  | See p2   |                      | recorded in S3.01.If fragments received,<br>the highest grade of dysplasia should be<br>recorded.)  |  |  |
| <u>\$2.03</u>        | *Polyp identification (For each specimen submitted record: how the specimen is labelled; the number of polyps/tissue pieces, the polyp site location, polyp conformation and intact polyp diameter.) | Not specified/not<br>assessable<br>OR<br>Label | <u>\$3.03</u>        | Significant villous architecture (This should be recorded for each conventional adenoma recorded in S3.01.)   | Absent<br>Present                            |  |
|                      |  | Number per container                           | G3.01                | Evidence of polyposis syndrome  | Absent<br>Present                            |  |
| <b>S2.04</b>         | *Specimen sites of polyps  | See p2   |                      | Details   | Text   |  |
| <u>\$2.05</u>        | Polyp confirmation (Repeat for each intact polyp noted in  | Intact<br>Fragments                            | G3.02                | Polyp resection (non-malignant)   | Adequate<br>Inadequate                       |  |
| S2.06                | S2.02.)  Intact polyp diameter   | mm   | <u>\$3.04</u>        | *Tumour type  | See p3                                       |  |
| 32.00                | (Repeat for each intact polyp noted in   | mm   | <u>S3.05</u>         | *Histological tumour grade  | See p3                                       |  |
| <u>G2.01</u>         | Diameter of the largest fragment   | mm ORmm xmm aggregate tissue                   | <u>\$3.06</u>        | Poor differentiation<br>(undifferentiated tumour)<br>(This should be recorded for each polyp<br>classified as malignant in S3.01.)  | Absent<br>Present                            |  |
| <u>G2.02</u>         | *Description of polyp (e.g. colour, shape, contour, ulceration etc.) (Repeat for each intact polyp noted in \$2.02.)   | See p2   | G3.03                | *Tumour budding  (After scanning 10 fields on a 20x objective lens, the hotspot field normalised to represent a field of 0.785 mm². If present, consider recording the number of foci.) | Cannot be assessed OR No. of tumour buds*:   |  |
|                      | *Classification  | Not given                                      |                      | *Tumour budding score   | See p3                                       |  |
|                      | ut.  | OR<br>—  | S3.07                | *Lymphatic and venous   | See p3                                       |  |
|                      | *Paris Classification  | Text   |                      | invasion (This should be recorded for each polyp  |  |  |
|                      | *Lateral spreading tumour classification   | Text   | S3.08                | classified as malignant in S3.01.)  *Perineural invasion  | Not identified                               |  |
| S2.07                | *Optical diagnosis  *Specimen dimensions   | Text   | <u>55.00</u>         | (This should be recorded for each polyp classified as malignant in S3.01.   | Present                                      |  |
| 32.07                | •  |  | <b>S3.09</b>         | *Margin status  | See p3                                       |  |
|                      | *Maximum dimension of intact specimen  *Maximum diamteter of intact  | xmm  | <u>G3.04</u>         | Morphology (This should be recorded for each polyp classified as malignant in S3.01.)   | Pedunculated<br>Sessile<br>Indeterminate     |  |
|                      | polyp  |  | S3 10                | Extent of invasion  | See p3                                       |  |
|                      | *Aggregated dimensions for fragmented polyps   | xmm  | S3.11                | *Invasive carcinoma   | Can't be assess'd                            |  |
|                      | *Maximum dimension of largest piece for fragmented polyps  | mm   |                      | dimensions  | OR Maximum depth of invasion:mm              |  |
| <u>G2.03</u>         | TEMS specimen  Lesion dimensions   | xxmm   |                      |   | OR Maximum width of invasion:mm              |  |
|                      | Colour   | Text   | <u>S3.12</u>         | Coexistent abnormalities  | See p3                                       |  |
|                      | Surface contour<br>Ulteration  | Absent   | <u>G3.05</u>         | Comment on risk for residual disease  | Text   |  |
| S2.08                | Nature and site of blocks  | Present<br>Text                                | G3.07                | Additional microscopic comment  | Text   |  |
| 32.08                | Mature and Site of Diocks  | IEXL   |                      |   |  |  |

| Ancillary test findings |   |                |  |  |  |  |
|-------------------------|---|----------------|--|--|--|--|
| <u>\$4.01</u>           | *Mismatch repair (MMR)                              | See p3         |  |  |  |  |
| <u>G4.01</u>            | *Additional ancillary studies                       | See p3         |  |  |  |  |
| <u>G4.02</u>            | Special stains                                      | Text           |  |  |  |  |
| <u>G4.03</u>            | *For neuroendocrine neoplasm neuroendocrine markers | Not applicable |  |  |  |  |
|                         | *Neuroendocrine markers                             | Text           |  |  |  |  |
|                         | *Ki-67 proliferation index                          | %              |  |  |  |  |
|                         | *Other  | Text           |  |  |  |  |

| Synthesis and overview |                     |            |  |  |  |  |
|------------------------|---------------------|------------|--|--|--|--|
| <u>G5.01</u>           | Diagnostic summary  | Text       |  |  |  |  |
| CE 04                  | 0                   | <b>-</b> . |  |  |  |  |
| 55.01                  | Overarching comment | Text       |  |  |  |  |

## S1.02/S2.01 Clinical information

Information not provided

Structured entry as below:

#### Select all that apply:

- Screening colonoscopy
- Known polyposis syndrome
  - o Familial adenomatous polyposis (FAP)
  - o MUTYH-associated polyposis (MAP)
  - o Serrated polyposis
  - o Other, specify
  - Lynch syndrome
- Chromic inflammatory bowel disease
  - o Ulcerative colitis
  - o Crohn disease
- Previous polyp(s)
- Previous colorectal cancer

## S2.02 Endoscopic procedure

Not specified

OR

Select all that apply:

- Polypectomy / Endoscopic mucosal resection (EMR)
  - Cautery
    - Not specified
    - Used
    - Not used
      - Submucosal injection
      - Not specified
      - Used (EMR)
    - Not used
  - Resection type
    - Not specified
    - En bloc
    - Piecemeal
- Endoscopic submucosal dissection (ESD)
- Transanal endoscopic microsurgery (TEMS)
- Transanal minimally invasive surgery (TAMIS)
- Endoscopic full thickness resection (EFTR)
- Other, specify

# S2.04 Specimen sites of polyps

- Not specified
- Caecum
- Ileocaecal valve
- Appendiceal orifice Ascending colon
- Hepatic flexure
- Transverse colon
- Splenic flexure
- Descending colon
- Sigmoid colon
- Rectosigmoid junction
- Rectum
- Anorectal junction
- Numeric: mm from anal verge
- Other, specify

Note: This will be repeated for each specimen noted in S2.01.

For large numbers of polyps, a table may assist to present this in a clearer

## G2.02 Description of polyp

(e.g. colour, shape, contour, ulceration etc.)

#### Text

- Not specified
- Numeric: \_\_mm Size range: \_\_mm to \_\_mm
- Size category:
- Diminuitive
  - Small
  - Large
  - Present 0

Note: This will be repeated for each polyp noted in S2.02

## S3.01 Polyp type and number

Single select value list if intact polyps received. Multi select where a location has polyp fragments:

- Not polyp identified (normal mucosa)
- Tubular adenoma
- Tubular adenoma, high grade
- Tubulovillous adenoma
- Tubulovillous adenoma, high grade
- Villous adenoma
- Villous adenoma, high grade
- Hyperplastic polyp
- Sessile serrated lesion
- Sessile serrated lesion with dysplasia
- Traditional serrated adenoma
- Traditional serrated adenoma, high grade
- Serrated adenoma unclassified
- Suspicious for adenocarcinoma
- Adenocarcinoma\*
- Neuroendocrine tumour
  - Grade 1
  - Grade 2
  - Grade 3 o
- Neuroendocrine carcinoma

  Small cell type

  - Large cell type
- Mixed neuroendocrine-non-neuroendocrine neoplasm (MiNEN)
- Harmatomatous polyp
- Inflammatory polyp
- Mucosal prolapse polyp
- Other, specify

Note: For each location from which specimens have been received and recorded in S2.02, record the type of polyp from the list below and the number of polyps/tissue pieces of that type.

If carcinoma, S3.05 – S3.11 must be recorded, and consider recording G3.03-4.

# S3.01 Tumour type

- Not applicable
- No evidence of residual tumour Adenocarcinoma, not otherwise specified (NOS)
- Mucinous adenocarcinoma
- Signet ring cell adenocarcinoma
- Medullary carcinomar
- Serrated adenocarcinoma
- Micropapillary adenocarcinoma
- Adenoma-like adenocarcinoma Neuroendocrine carcinoma
- Small cell type
- Large cell type
- Mixed neuroendocrine-non-neuroendocrine
- Other, specify

Note: This should be recorded for each polyp classified as malignant in S3.01.

Precursor polyp/lesion

- Absent
- Present, specify type\*

\*Note: Refer to S3.01 Type of polyp.

# S3.02 Histological tumour grade

- Not applicable
- Low grade  $\geq$ 50% (formerly well to moderately differentiated
- High grade <50% (formerly poorly differentated and undifferentiated)

Note: This should be recorded for each polyp classified as malignant in S3.01

#### G3.03 Tumour budding score

- Bd1 low budding (0-4 buds)
- Bd2 intermediate budding (5-9 buds)
- Bd3 high budding (≥10 buds)

Note: This should be recorded for each polyp classified as malignant in S3.01

## S3.07 Lymphatic and venous invasion

- Not identified
- Present
  - O Small vessel (lymphatic, capillary or venular)
  - O Large vessel (venous)
    - Intramural
    - Extramural

Note: This should be recorded for each polyp classified as malignant in S3.01

## S3.09 Margin status

Note: This should be recorded for each polyp classified as malignant

#### Deep margin

- Cannot be assessed
- Involved
- Not involved, specify distance to neoplasia

Distance to invasive carcinoma \_\_mm

#### Lateral margin

- Cannot be assessed
- Involved
- Not involved, specify distance to neoplasia

Involved margin(s): Text Distance to invasive carcinoma mm

#### S3.10 Extent of invasion

- Non-invasive neoplasia/high grade dysplasia
- Invasion into submucosa
- Invasion into muscularis propria
- Invasion through the muscularis propria into pericolorectal connective tissue
- Invasion into the surface of the visceral peritoneum
- Invasion into the adjacent structure(s)/organ(s), specify

#### **S3.12 Coexistent abnormalities**

- None noted
- Ulcerative colitis
- Crohn disease
- Primary sclerosing cholangitis (PSC)
- Inflammatory bowel disease, not otherwise specified
- Other, specify

Note: If Other is selected, provide details. If Ulcerative colitis, Crohn disease, Primary sclerosing cholangitis (PSC) or Inflammatory bowel disease, not otherwise specified is selected the following text may be added to allow clarification of colorectal carcinoma risk

'Dysplastic lesions arising in an area affected by inflammatory bowel disease are a heterogeneous group. Many are adenoma – like, and are not progressive. Conservative management may be warranted if the following conditions are met: Macroscopically adenoma – like in appearance; excised with clear margins; no flat dysplasia of surrounding mucosa and/or polyp stalk. If these criteria are not met, the lesion should be regarded as having a significant risk for associated or subsequent colorectal carcinoma.

# S4.01 Mismatch repair (MMR) status by immunohistochemistry

- Not tested
- Not interpretable
- MMR proficient
- MMR deficient
  - o MLH1/PMS2 loss
  - o MSH2/MSH6 loss
  - o MSH6 loss
  - o PMS2 loss
  - 0 Other, specify

Note: Mismatch repair enzyme immunohistochemistry results may be recorded for each malignant polyp recorded in S3.01.

## MMR status by microsatellite instability (MSI) testing

- Not tested
- Test failed
- MSI-high
- MST-low
- MSI-stable

## **G4.01** Additional ancillary studies

#### BRAF (V600E) mutation testing

- Not tested
- Test failed
- Mutated Wild type

#### **MLH1** promoter methylation testing

- Not tested
- Test failed
- Methylated
- Not methylated
- Inconclusive

#### **RAS** mutation testing

- Not tested
- Test failed
- Mutated, specify
- Wild type