Colorectal Cancer Histopathology Reporting Proforma

Includes the ICCR International Collaboration on Cancer reporting dataset denoted by *

Family name

Given name(s)

Date of birth

DD – MM – YYYY

Patient identifiers
e.g. MRN, IHI or NHI (please indicate which)

Sex
- ◯ Male
- ◯ Female
- ◯ Intersex/indeterminate

Ethnicity
- ◯ Unknown
- ◯ Aboriginal/Torres Strait Islander (AU)
- ◯ Māori (NZ)
- ◯ Other ethnicity:

Date of request

DD – MM – YYYY

S1.03 Accession number

Requesting doctor - name and contact details

Mandatory questions (i.e. protocol standards) are in bold (e.g. **S1.03**).

☐ Indicates multi-select ◯ Indicates single select

Clinical information

***S1.02/S2.02**

OR

- ◯ Information not provided
- ☐ Known polyposis syndrome
  - ☐ Familial adenomatous polyposis (FAP)
  - ☐ *MUTYH*-associated polyposis (MAP)
  - ☐ Serrated polyposis
  - ☐ Other, *specify*
- ☐ Lynch syndrome
- ☐ Chronic inflammatory bowel disease
  - ☐ Ulcerative colitis
  - ☐ Crohn disease
- ☐ Previous polyp(s)
- ☐ Previous colorectal cancer
- ☐ Other, *specify*

NEOADJUVANT THERAPY
- ◯ Information not provided
- ◯ Not administered
- ◯ Administered, *describe*

G1.01 COPY TO DOCTORS

S1.04 PRINCIPAL CLINICIAN

G1.02 OTHER CLINICAL COMMENTS

Macroscopic findings

S2.01 SPECIMEN LABELLED AS

S2.03 *OPERATIVE PROCEDURE (select all that apply)
- ☐ Total colectomy
- ☐ Proctocolectomy
- ☐ Right hemicolectomy
- ☐ Extended right hemicolectomy
- ☐ Transverse colectomy
- ☐ Left hemicolectomy
- ☐ Sigmoid colectomy
- ☐ Anterior resection
  - ◯ High
  - ◯ Low
- ☐ Hartmann's procedure
- ☐ Abdominoperineal resection
- ☐ Other, *specify*

S2.04 SPECIMEN LENGTH

mm

S2.05 *TUMOUR SITE (select all that apply)
- ◯ Not specified
- ◯ Caecum
- ◯ Ascending colon
- ◯ Hepatic flexure
- ◯ Transverse colon
- ◯ Splenic flexure
- ◯ Descending colon
- ◯ Sigmoid colon
- ◯ Rectosigmoid[b]
- ◯ Rectum
- ◯ Other, *specify*

[a] *If multiple primary tumours are present, separate datasets should be used to record this and all following elements for each primary tumour.*

[b] *Reserved for cases in which an accurate determination between rectum and sigmoid cannot be made by pathological assessment and clinical information regarding site is not available.*

S2.06 *TUMOUR DIMENSIONS*

◯ Cannot be assessed

Maximum tumour dimension | Tumour identification

mm

Repeat tumour identification and maximum dimension for each tumour identified

Additional dimensions

mm x mm

S2.07 DISTANCE OF TUMOUR TO THE NEARER PROXIMAL OR DISTAL 'CUT END'

◯ Cannot be assessed OR mm

S2.08 DISTANCE OF TUMOUR TO THE NONPERITONEALISED CIRCUMFERENTIAL MARGIN

◯ Cannot be assessed OR mm

S2.09 *PERFORATION[c]

◯ Not identified

◯ Present

- ◯ Through tumour (tumour perforation)
- ◯ Not involving tumour

[c] *Defined as a macroscopically visible full thickness defect in the wall.*

S2.10 *RELATION OF TUMOUR TO ANTERIOR PERITONEAL REFLECTION

(Applicable to any specimen containing a rectal cancer e.g., anterior resection, abdominoperineal resection, proctocolectomy)

◯ Not applicable
◯ Entirely above
◯ Entirely below
◯ Astride

S2.11 *PLANE OF MESORECTAL EXCISION

(Applicable to any specimen containing a rectal cancer e.g., anterior resection, abdominoperineal resection, proctocolectomy)

◯ Not applicable
◯ Mesorectal fascia (complete)
◯ Intramesorectal (near complete)
◯ Muscularis propria (incomplete)

G2.01 *PLANE OF SPHINCTER EXCISION

(Applicable to abdominoperineal excision specimens only and should be reported in addition to the mesorectal plane)

◯ Extralevator plane
◯ Sphincteric plane
◯ Intrasphincteric plane

G2.02 *PLANE OF MESOCOLIC EXCISION

(Applicable to any specimen containing a colon cancer)

◯ Mesocolic plane
◯ Intramesocolic plane
◯ Muscularis propria plane

G2.03 PERITONEUM

◯ Tumour invades to the peritoneal surface
◯ Tumour has formed nodule(s) discrete from the tumour mass along the serosal surface

G2.03 ADDITIONAL MACROSCOPIC COMMENTS

Microscopic findings

S3.01 *HISTOLOGICAL TUMOUR TYPE

(Value list from the World Health Organization Classification of Tumours of the Gastrointestinal Tract (2019))

◯ Adenocarcinoma not otherwise specified (NOS)
◯ Mucinous adenocarcinoma
◯ Signet-ring cell adenocarcinoma
◯ Medullary carcinoma
◯ Serrated adenocarcinoma
◯ Micropapillary adenocarcinoma
◯ Adenoma-like adenocarcinoma
◯ Other, *specify*

S3.02 *HISTOLOGICAL TUMOUR GRADE

(Only adenocarcinoma NOS and mucinous adenocarcinoma should be graded)

◯ Not applicable
◯ Low grade ≥50% (formerly well to moderately differentiated)
◯ High grade <50% (formerly poorly differentiated)

S3.03 *EXTENT OF INVASION

◯ Cannot be assessed
◯ No evidence of primary tumour
☐ High grade dysplasia/non-invasive neoplasia
☐ Invasion into submucosa
☐ Invasion into muscularis propria
☐ Invasion into subserosa or into pericolic or perirectal connective tissues
☐ Invasion onto the surface of the visceral peritoneum
☐ Invasion directly into other structures/organs, *specify*

G3.01 *MEASUREMENT OF INVASION BEYOND MUSCULARIS PROPRIA *(Only applicable to pT3 tumours)*

◯ Cannot be assessed

Distance of invasion beyond the muscularis propria mm

G3.02 INFLAMMATORY CELL INFILTRATE

(Record the scoring system used)

S3.04 *LYMPHATIC AND VENOUS INVASION

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

S3.05 *PERINEURAL INVASION

- ◯ Not identified
- ◯ Present

S3.06 *LYMPH NODE STATUS

- ◯ No nodes submitted or found
- ◯ Cannot be assessed

Number of lymph nodes examined ____

- ◯ Not involved
- ◯ Involved

Number of involved lymph nodes ____

G3.03 APICAL NODE INVOLVEMENT

- ◯ Not applicable
- ◯ Absent
- ◯ Present

G3.04 RATIO OF INVOLVED/TOTAL LYMPH NODES

____ involved / ____ total

S3.07 *TUMOUR DEPOSITS

- ◯ Not identified
- ◯ Present
  - ◯ Vascular
  - ◯ Other

Number of tumour deposits ____

G3.05 *TUMOUR BUDDING

(Should only be reported in non-mucinous and non-signet ring cell adenocarcinoma areas)

- ◯ Cannot be assessed

Number of tumour buds[d] ____

Tumour budding score

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

[d] *After scanning 10 fields on a 20x objective lens, the hotspot field normalised to represent a field of 0.785 mm².*

S3.08 *RESPONSE TO NEOADJUVANT THERAPY

- ◯ No neoadjuvant treatment
- ◯ Complete response – no viable cancer cells (score 0)
- ◯ Near complete response – single cells or rare groups of cancer cells (score 1)
- ◯ Partial response – residual cancer with evident tumour regression (score 2)
- ◯ Poor or no response – extensive residual cancer with no evident tumour regression (score 3)
- ◯ Cannot be assessed, *specify*

S3.09 *MARGIN STATUS

Longitudinal margin status

- ◯ Cannot be assessed
- ◯ Not involved, *estimate distance to closer margin*[e]

____ mm

- ◯ Involved, *specify proximal or distal margin*[e]

[e] *Includes assessment of any separately submitted anastomotic ring(s).*

Circumferential margin status

- ◯ Cannot be assessed
- ◯ Not involved, *specify distance to nearest 1 mm or ≥10 mm*

____ mm OR ◯ ≥10 mm

- ◯ Involved (≤1 mm), *specify 0 mm or distance to nearest 0.1 mm*

____ mm

  - ◯ By primary tumour
  - ◯ By other, *specify*

S3.10 *DISTANT METASTASES

- ◯ Not identified
- ◯ Present, *specify site(s)*

G3.06 *COEXISTENT PATHOLOGY (select all that apply)

- ◯ None identified
- ☐ Polyp(s), *specify*
- ☐ Synchronous carcinoma(s), *specify*
- ☐ Other, *specify*

S3.11 MICROSCOPIC RESIDUAL TUMOUR STATUS
(completeness of resection)

G3.07 ADDITIONAL MICROSCOPIC COMMENT

Ancillary findings

G4.01 *MISMATCH REPAIR (MMR) IMMUNOHISTOCHEMISTRY

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

G4.02 **BRAF* V600E mutation testing

- ◯ Not tested
- ◯ Test failed
- ◯ Mutated
- ◯ Wild type

**MLH1* promoter methylation testing

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

G4.03 *MMR STATUS BY MICROSATELLITE INSTABILITY (MSI) TESTING

- ◯ Not tested
- ◯ Test failed
- ◯ MSI-high
- ◯ MSI-low
- ◯ MS-stable

G4.04 RAS gene mutation testing (*KRAS* exons 2, 3 or 4, *NRAS* exons 2, 3 or 4 or *RAS* mutation

- ◯ Mutated
- ◯ Wild type
- ◯ Not tested

COMMENTs

Laboratory performing test and report number

G4.05 *NEUROENDOCRINE NEOPLASM MARKERS
For neuroendocrine neoplasms only

- ◯ Not applicable
- ◯ Neuroendocrine markers, *specify result(s) if available*

AND

Ki-67 proliferation index %

Synthesis and overview

S5.01 *PATHOLOGICAL STAGING (AJCC TNM 8th edition)

TNM Descriptors (only if applicable) (select all that apply)

- ☐ m - multiple primary tumours
- ☐ r - recurrent
- ☐ y - post-therapy

Primary tumour (pT)*

- ◯ TX Primary tumour cannot be assessed
- ◯ T0 No evidence of primary tumour
- ◯ Tis Carcinoma in situ, intramucosal carcinoma (involvement of lamina propora with no extension through muscularis mucosae)
- ◯ T1 Tumour invades the submucosa (through the muscularis mucosa but not into the muscularis propria)
- ◯ T2 Tumour invades the muscularis propria
- ◯ T3 Tumour invades through the muscularis propria into pericolorectal tissues
- ◯ T4 Tumour invades* the visceral peritoneum or invades or adheres** to adjacent organ or structure
  - ◯ T4a Tumour invades* through the visceral peritoneum (including gross perforation of the bowel through tumour and continuous invasion of tumour through areas of inflammation to the surface of the visceral peritoneum)
  - ◯ T4b Tumour directly invades* or adheres** to adjacent organs or structures

**Direct invasion in T4 includes invasion of other organs or other segments of the colorectum as a result of direct extension through the serosa, as confirmed on microscopic examination (for example, invasion of the sigmoid colon by a carcinoma of the cecum) or, for cancers in a retroperitoneal or subperitoneal location, direct invasion of other organs or structures by virtue of extension beyond the muscularis propria (i.e., respectively, a tumour on the posterior wall of the descending colon invading the left kidney or lateral abdominal wall; or a mid or distal rectal cancer with invasion of prostate, seminal vesicles, cervix, or vagina).*

***Tumour that is adherent to other organs or structures, grossly, is classified cT4b. However, if no tumour is present in the adhesion, microscopically, the classification should be pT1-4a depending on the anatomical depth of wall invasion. The V and L classification should be used to identify the presence or absence of vascular or lymphatic invasion whereas the PN prognostic factor should be used for perineural invasion.*

Regional lymph nodes (pN)

- ◯ NX Regional lymph nodes cannot be assessed
- ◯ N0 No regional lymph node metastasis
- ◯ N1 One to three regional lymph nodes are positive (tumour in lymph nodes measuring ≥0.2 mm), or any number of tumour deposits are present and all identifiable lymph nodes are negative
  - ◯ N1a One regional lymph node is positive
  - ◯ N1b Two or three regional lymph nodes are positive
  - ◯ N1c No regional lymph nodes are positive, but there are tumour deposits in the
    - subserosa
    - mesentery
    - or nonperitonealised pericolic, or perirectal/ mesorectal tissues
- ◯ N2 Four or more regional nodes are positive
  - N2a Four to six regional lymph nodes are positive
  - N2b Seven or more regional lymph nodes are positive

Distant metastasis (pM)

- ◯ M0 No distant metastasis by imaging, etc.; no evidence of tumour in distant sites or organs (This category is not assigned by pathologists.)
- ◯ M1 Metastasis to one or more distant sites or organs or peritoneal metastasis is identified
  - ◯ M1a Metastasis to one site or organ is identified without peritoneal metastasis
  - ◯ M1b Metastasis to two or more sites or organs is identified without peritoneal metastasis
  - ◯ M1c Metastasis to the peritoneal surface is identified alone or with other site or organ metastases

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S5.02 RESIDUAL TUMOUR STATUS

- ◯ RX Presence of residual tumour cannot be assessed
- ◯ R0 No residual tumour
- ◯ R1 Microscopic residual tumour
- ◯ R2 Macroscopic residual tumour at the primary cancer site or regional nodal sites. (This designation is not used to indicate metastatic disease identified but not resected at surgical exploration.)

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S5.02 Year and edition of staging system

G5.01 DIAGNOSTIC SUMMARY
Include: Specimen submitted, Histological tumour type, Diameter of largest tumour, Completeness of excision, Tumour stage.

S5.03 OVERARCHING COMMENT

G5.02 Edition/version number of the Cancer Structured Reporting Protocol.