

## COSD mapping for Appendix J: Reporting proforma for liver resection: intrahepatic cholangiocarcinoma in list format

| RCPATH Data set item element name | Values | Implementation comments         | COSD Pathology v4.0.2 (2020)   | COSD Pathology v5.1.1 (2024)   |
|-----------------------------------|--------|---------------------------------|--|--|
| <b>Surname</b>                    |        |                                 | CR0050 - Person Family Name  | CR0050 - Person Family Name  |
| <b>Forenames</b>                  |        |                                 | CR0060 - Person Given Name   | CR0060 - Person Given Name   |
| <b>Date of birth</b>              |        |                                 | CR0100 - Person Birth Date   | CR0100 - Person Birth Date   |
| <b>Sex</b>                        |        |                                 | CR3170 - Person Stated Gender Code   | CR3170 - Person Stated Gender Code   |
| <b>Hospital</b>                   |        |                                 | pCR0800 - Organisation Identifier (of Reporting Pathologist)                               | pCR0800 - Organisation Identifier (of Reporting Pathologist)                               |
| <b>Hospital no</b>                |        |                                 | CR0020 - Local Patient Identifier  | CR0020 - Local Patient Identifier  |
| <b>NHS/CHI no</b>                 |        | CHI number not recorded in COSD | CR0010 - NHS Number  | CR0010 - NHS Number  |
| <b>Date of receipt</b>            |        |                                 | pCR0770 - Sample Receipt Date  | pCR0770 - Sample Receipt Date  |
| <b>Date of reporting</b>          |        |                                 | pCR0780 - Investigation Result Date  | pCR0780 - Investigation Result Date  |
| <b>Report no</b>                  |        |                                 | pCR0950 - Service Report Identifier  | pCR0950 - Service Report Identifier  |
| <b>Pathologist</b>                |        |                                 | pCR7100 - Professional Registration Issuer Code - Consultant (Pathology Test Requested By) | pCR7100 - Professional Registration Issuer Code - Consultant (Pathology Test Requested By) |

|   |                                 |   |   |   |
|---|---------------------------------|---|---|---|
|   |                                 |   | pCR7120 - Professional Registration Entry Identifier - Consultant (Pathology Test Requested By)       | pCR7120 - Professional Registration Entry Identifier - Consultant (Pathology Test Requested By)       |
| <b>Surgeon</b>  |                                 |   | Not in the COSD Pathology data set, although could be recorded within pCR1020 - Pathology Report Text | Not in the COSD Pathology data set, although could be recorded within pCR1020 - Pathology Report Text |
| <b>Gross description</b>                              |                                 |   |   |   |
| <b>Type of specimen</b>                               | Single selection value list:    | Use pCR1020 - Pathology Report Text to specify 'List segments (if known) if segmental resection is selected, To specify 'Site/segment of origin' if non-anatomic (wedge resection is selected), use pCR1020 - Pathology Report Text | pCR0760 – Pathology Investigation Type (All values)   | pCR0760 – Pathology Investigation Type (All values)   |
|   | Segmental resection             |   | EX- Excision; PE - Partial Excision   | EX- Excision; PE - Partial Excision   |
|   | - List segments (if known)      |   |   |   |
|   | Non-anatomic (wedge) resection  |   | EX- Excision; PE - Partial Excision   | EX- Excision; PE - Partial Excision   |
|   | - Site/segment of origin        |   |   |   |
|   | Hepatectomy (at transplant)     |   | RE - Radical Excision; PE - Partial Excision  | RE - Radical Excision; PE - Partial Excision  |
|   |                                 |   |   |   |
|   |                                 |   | pCR0970 – Specimen Nature (All values)  | pCR0970 – Specimen Nature (All values)  |
|   |                                 |   | 1 (Primary tumour)  | 1 (Primary tumour)  |
| <b>Specimen weight</b>                                | Integer                         | State specimen weight in grams (g)  | pCR1020 - Pathology Report Text   | pCR1020 - Pathology Report Text   |
| <b>For segmental resections, specimen dimensions:</b> | Integer (antero-posterior (mm)) |   | Not in the COSD Pathology data set, although could be recorded within pCR1020 - Pathology Report Text | Not in the COSD Pathology data set, although could be recorded within pCR1020 - Pathology Report Text |
|   | Integer (medio-lateral (mm))    |   |   |   |
|   | Integer (supero-inferior (mm))  |   |   |   |
| <b>Number of tumours present</b>                      | Integer                         |   | Not in the COSD Pathology v4.0.2 data set, although   | pLV10010 - Number of Tumours  |

|   |                                |  |  |  |
|---|--------------------------------|--|--|--|
|   |                                |  | could be recorded within<br>pCR1020 - Pathology Report<br>Text   |  |
| <b>List maximum tumour diameters</b>                        | Integer (mm)                   | Up to four separate values   | pCR1020 - Pathology Report<br>Text   | pCR1020 - Pathology Report<br>Text   |
| <b>Satellite tumour(s) present:</b>                         | Single selection value list:   |  | Not in the COSD Pathology<br>v4.0.2 data set, although<br>could be recorded within<br>pCR1020 - Pathology Report<br>Text | pLV10020 - Satellite Tumour<br>Indicator   |
|   | Yes                            |  |  | Y- Yes   |
|   | No                             |  |  | N - No   |
| <b>Distance from nearest hepatic resection margin: (mm)</b> | Integer (mm)                   |  | pCR1020 - Pathology Report<br>Text   | pCR1020 - Pathology Report<br>Text   |
| <b>Macroscopic involvement of vessels</b>                   | Multiple selection value list: |  | Not in the COSD Pathology<br>data set, although could be<br>recorded within pCR1020 -<br>Pathology Report Text           | Not in the COSD Pathology<br>data set, although could be<br>recorded within pCR1020 -<br>Pathology Report Text |
|   | Main left portal vein          |  |  |  |
|   | Main right portal vein         |  |  |  |
|   | Hepatic vein                   |  |  |  |
|   | Vessel not specified           |  |  |  |
|   | No macroscopic involvement     |  |  |  |
| <b>Diameter of vessel involved (mm)</b>                     | Integer (mm)                   | Leave blank if 'Macroscopic<br>involvement of vessels = No<br>macroscopic involvement' | pCR1020 - Pathology Report<br>Text   | pCR1020 - Pathology Report<br>Text   |
| <b>Liver capsule intact and smooth</b>                      | Single selection value list:   |  | Not in the COSD Pathology<br>v4.0.2 data set, although<br>could be recorded within<br>pCR1020 - Pathology Report<br>Text | pLV10030 - Liver Capsule<br>Intact and Smooth  |
|   | Yes                            |  |  | Y- Yes   |
|   | No                             |  |  | N - No   |
| <b>Invasion of adherent organ or adjacent organ</b>         | Single selection value list:   |  | Not in the COSD Pathology<br>v4.0.2 data set, although<br>could be recorded within<br>pCR1020 - Pathology Report<br>Text | pLV10040 - Invasion of<br>Adjacent Organ   |
|   | Yes                            |  |  | Y- Yes   |
|   | No                             |  |  | N - No   |

|  |                                      |  |  |   |
|--|--------------------------------------|--|--|---|
| If yes, which organ                      | Free text                            | Leave blank if ‘Invasion of adherent organ or adjacent organ = No’ | Not in the COSD Pathology v4.0.2 data set, although could be recorded within pCR1020 - Pathology Report Text | pLV10050 - Organ Invaded  |
| Lymph node(s) received                   | Single selection value list:         |  | Not in the COSD Pathology data set, although could be recorded within pCR1020 - Pathology Report Text        | Not in the COSD Pathology data set, although could be recorded within pCR1020 - Pathology Report Text |
|  | Yes                                  |  |  |   |
|  | No                                   |  |  |   |
| Histology                                |                                      |  |  |   |
| Tumour type                              | Single selection value list:         | If ‘other’ selected, specify                                       | Not in the COSD Pathology data set, although could be recorded within pCR1020 - Pathology Report Text        | Not in the COSD Pathology data set, although could be recorded within pCR1020 - Pathology Report Text |
|  | Cholangiocarcinoma NOS               |  |  |   |
|  | Subtype large duct                   |  |  |   |
|  | Small duct                           |  |  |   |
|  | Combined HCC/CC                      |  |  |   |
|  | Cholangiolocellular                  |  |  |   |
|  | Other histological subtype (specify) |  |  |   |
| If other specify                         | Free text                            | Enter value if ‘Tumour type = Other histological subtype’          | pCR1020 - Pathology Report Text  | pCR1020 - Pathology Report Text   |
| Tumour grade/differentiation             | Single selection value list:         |  | pCR0860 - Grade of Differentiation (Pathological)  | pCR0860 - Grade of Differentiation (Pathological)   |
|  | Well                                 |  | G1 - Well differentiated   | G1 - Well differentiated  |
|  | Moderate                             |  | G2 - Moderately differentiated   | G2 - Moderately differentiated  |
|  | Poor                                 |  | G3 - Poorly differentiated   | G3 - Poorly differentiated  |
| Tumour cells present at resection margin | Single selection value list:         |  | Not in the COSD Pathology data set, although could be recorded within pCR1020 - Pathology Report Text        | Not in the COSD Pathology data set, although could be recorded within pCR1020 - Pathology Report Text |
|  | Yes                                  |  |  |   |
|  | No                                   |  |  |   |
| If no, distance to resection margin      | Single selection value list:         |  | Not in the COSD Pathology data set, although could be  | Not in the COSD Pathology data set, although could be   |
|  | <1 mm                                |  |  |   |
|  | 1–10 mm                              |  |  |   |

|   |                              |   |  |   |
|---|------------------------------|---|--|---|
|   | >10 mm                       |   | recorded within pCR1020 - Pathology Report Text  | recorded within pCR1020 - Pathology Report Text   |
| <b>State distance</b>                             | Number (mm)                  | If 'Distance to resection margin = 1–10 mm, state distance in mm' | pCR1020 - Pathology Report Text  | pCR1020 - Pathology Report Text   |
| <b>Macroscopic vascular invasion confirmed</b>    | Single selection value list: |   | Not in the COSD Pathology data set, although could be recorded within pCR1020 - Pathology Report Text        | Not in the COSD Pathology data set, although could be recorded within pCR1020 - Pathology Report Text |
|   | Yes                          |   |  |   |
|   | No                           |   |  |   |
| <b>Microscopic vascular invasion identified</b>   | Single selection value list: |   | pCR0870 - Cancer Vascular or Lymphatic Invasion  | pCR0870 - Cancer Vascular or Lymphatic Invasion   |
|   | Present                      |   | YU - Yes - vascular/lymphatic invasion present   | YU - Yes - vascular/lymphatic invasion present  |
|   | Not identified               |   | NU - No - vascular/lymphatic invasion not present  | NU - No - vascular/lymphatic invasion not present   |
| <b>Perineural invasion identified</b>             | Single selection value list: |   | Not in the COSD Pathology v4.0.2 data set, although could be recorded within pCR1020 - Pathology Report Text | pCR1100 - Perineural Invasion   |
|   | Present                      |   |  | 1 - Present   |
|   | Not identified               |   |  | 2 - Not identified  |
| <b>Best block of tumour for molecular testing</b> | Free text                    |   | pCR1020 - Pathology Report Text  | pCR1020 - Pathology Report Text   |
| <b>Background liver</b>                           | Single selection value list: |   | pCR1020 - Pathology Report Text  | pCR1020 - Pathology Report Text   |
|   | Insufficient for assessment  |   |  |   |
| <b>Fibrosis</b>                                   | Single selection value list: |   | Not in the COSD Pathology v4.0.2 data set, although could be recorded within pCR1020 - Pathology Report Text | pLV10060 - Fibrosis in Background Liver   |
|   | None present                 |   |  | 1 - None present  |
|   | If present:                  |   |  |   |
|   | - Portal/periportal          |   |  | 2 - Portal/periportal   |
|   | - Sinusoidal/pericellular    |   |  | 3 - Sinusoidal/pericellular   |
|   | - Both portal & sinusoidal   |   |  | 4 - Both portal and sinusoidal  |
|   | - Bridging                   |   |  | 5 - Bridging  |

|  |   |  |  |  |
|--|---|--|--|--|
|  | - Bridging with nodules   |  |  | 6 - Bridging with nodules                        |
|  | - Complete cirrhosis  |  |  | 7 - Complete cirrhosis                           |
| <b>Aetiology</b>                             | Multiple selection value list:  |  | Not in the COSD Pathology v4.0.2 data set, although could be recorded within pCR1020 - Pathology Report Text | pLV10070 - Aetiology of Background Liver Disease |
|  | Hepatitis B   |  |  | 1 - Hepatitis B                                  |
|  | Hepatitis C   |  |  | 2 - Hepatitis C                                  |
|  | Autoimmune hepatitis  |  |  | 3 - Autoimmune hepatitis                         |
|  | Haemochromatosis  |  |  | 4 - Haemochromatosis                             |
|  | Alcohol   |  |  | 5 - Alcohol                                      |
|  | NAFLD   |  |  | 6 - Non-Alcoholic Fatty Liver Disease (NAFLD)    |
|  | Not known   |  |  | 9 - Not known                                    |
|  | Other   |  |  | 8 - Other  |
| <b>Other</b>                                 | Free text   | Please specify if 'Aetiology = Other'  | pCR1020 - Pathology Report Text  | pCR1020 - Pathology Report Text                  |
| <b>Number of lymph nodes examined</b>        | Integer   |  | pCR0890 - Number of Nodes Examined   | pCR0890 - Number of Nodes Examined               |
| <b>Number of lymph nodes with metastases</b> | Integer   |  | pCR0900 - Number of Nodes Positive   | pCR0900 - Number of Nodes Positive               |
| <b>Pathological staging pT</b>               | Single selection value list:  | Enter values for pT and pN (e.g. pT1a) | pCR0910 - T Category (Pathological) = pT   | pCR0910 - T Category (Pathological) = pT         |
|  | pTis Carcinoma in situ  |  |  |  |
|  | pT1a Solitary tumour <50 mm without vascular invasion   |  |  |  |
|  | pT1b Solitary tumour >50 mm without vascular invasion   |  |  |  |
|  | pT2 Solitary with intrahepatic vascular invasion or multiple tumours, with or without vascular invasion |  |  |  |

|  |   |  |  |  |
|--|---|--|--|--|
|  | pT3 Tumour perforating the visceral peritoneum.                       |  |  |  |
|  | pT4 Tumour involves local extra hepatic structures by direct invasion |  |  |  |
| <b>Pathological staging pN</b>         | Single selection value list:  |  | pCR0920 - NCategory (Pathological) = pN    | pCR0920 - NCategory (Pathological) = pN    |
|  | pN0 No lymph node metastases  |  |  |  |
|  | pN1 Lymph node metastases   |  |  |  |
| <b>Pathological staging pM</b>         | Free text   |  | pCR0930 - NCategory (Pathological) = pM    | pCR0930 - NCategory (Pathological) = pM    |
|  |   |  |  |  |
| <b>TNM edition number used</b>         | UICC8, UICC9  | Within COSD, version number and edition are separate but should be reported together | pCR6820 - TNMVersion Number (Pathological) | pCR6820 - TNMVersion Number (Pathological) |
|  |   |  | pCR6980 - TNMCoding Edition                | pCR6980 - TNMCoding Edition                |
| <b>SNOMED-CT codes</b>                 |   | May have multiple codes. Look up from SNOMED tables.                                 | pCR6410 - Topography (SNOMED) Pathology    | pCR6410 - Topography (SNOMED) Pathology    |
| <b>SNOMED-CT codes</b>                 |   | May have multiple codes. Look up from SNOMED tables.                                 | pCR6420 - Morphology (SNOMED) Pathology    | pCR6420 - Morphology (SNOMED) Pathology    |
| <b>ICD 11 code:</b>                    | Intrahepatic cholangiocarcinoma: 2C12.10                              |  | pCR1020 - Pathology Report Text            | pCR1020 - Pathology Report Text            |
| <b>Comments/additional information</b> | Free text   |  | pCR1020 - Pathology Report Text            | pCR1020 - Pathology Report Text            |