**Pathology reporting of breast disease in surgical excision specimens incorporating the dataset for histological reporting of breast cancer**

**Appendix A NHS BSP breast pathology synoptic proforma template for surgically resected lesions, including dataset and commonly used optional items**

This template is provided as an example proforma for use for synoptic reporting of breast screening and symptomatic breast disease related specimens. It can be separated into separate documents for reporting benign, *in situ* carcinoma and invasive carcinoma related cases and can be adapted to suit local needs and protocols (but must include the RCPath dataset, see Appendix B. Sections in italics are regarded as optional.

**Pathology report**

Patient’s identifier: ......................................................................................................................

Date reported: ................................................... Report number: ..............................................

Pathologist: ....................................................... Laboratory: .....................................................

**Surgical specimen(s)**

Side: Right □ Left □

Specimen type:

WLE □ Excision biopsy □ Localisation specimen □ Segmental excision □

Mastectomy □ Subcutaneous mastectomy □

Re-excision □ Further margins (including cavity shaves/bed biopsies) □

Microdochectomy/microductectomy □

SLN □ Axillary sampling □ Axillary LN level I □

Axillary LN level II □ Axillary LN level III □ Total duct excision/Hadfield’s procedure □

Other ..........................................................

Specimen weight (g) ..........................................

Comment: ..................................................................................................................................

*Specimen radiograph seen: Yes □ No □*

*Mammographic abnormality: Yes □ No □ Unsure □*

*Site of previous core biopsy seen Yes □ No □*

*Histological calcification Absent □ Benign □ Malignant □ Both □*

**Benign lesions**

Columnar cell change □ Complex sclerosing lesion/radial scar □ Fibroadenoma □

Fibrocystic change □ Multiple papillomas □ Papilloma (single) □

Periductal mastitis/duct ectasia □ Sclerosing adenosis □ Solitary cyst □

Other □ Specify other.........................

**Epithelial proliferation:** Not present □ Present without atypia □

Flat epithelial atypia □ Present with atypia (ductal) □ Present with atypia (lobular) □

**Malignant lesions**

**Malignant *in situ* lesion:**  Not present □ Present □

***In situ* components**: Ductal □ Lobular □ Paget’s □

DCIS grade: High □ Intermediate □ Low □ Not assessable □

*DCIS growth pattern: Solid □ Cribriform □ Papillary □ Micropapillary □*

 *Apocrine □ Flat □ Comedo □*

 *Other □ Specify other......................*

*DCIS necrosis: Present □ Absent □*

*Inflammation: Present □ Absent □*

‘Pure’ DCIS size mm: ...........................................

LCIS: Present □ Absent □

Paget’s disease: Present □ Absent □

Microinvasive: Present □ Absent □

**Invasive carcinoma**  Present □ Absent □

**Size and extent**

Tumour size (mm): ...................................

Whole tumour size (mm): ...............................

Disease extent: Localised □ Multiple invasive foci □ Not assessable □

**Invasive tumour type** Pure □ (tick one box below) Mixed □ (tick all components present below)

Tubular/Cribriform □ Lobular □ Mucinous □ Medullary-like □ Ductal/NST □ Micropapillary □

Other □ Other type/component: ..........................................................................................

**Histological grade** 1 □ 2 □ 3 □ Not assessable □

*Components (optional): Tubule formation 1 □ 2 □ 3 □ Not assessable □*

*Nuclear pleomorphism 1 □ 2 □ 3 □ Not assessable □*

*Mitoses 1 □ 2 □ 3 □ Not assessable □*

**Lymphovascular invasion** Present □ Absent □ Possible □

**Lymph node stage**

*Intra-operative assessment (optional)*

*Sentinel LN assessed: No □ Yes □ Positive □ Negative □*

*Sentinel LN positive: Macrometastasis □ Micrometastasis □ ITCs □*

*(Note ITCs only classified as node negative)*

*Method of assessment: PCR □ OSNA □ Frozen section □ Cytology □ Other □*

Axillary nodes present: No □ Yes □

Total present: ..........

Total positive:...........

*Extracapsular spread: Present □ Not identified □*

For single node positive: Macrometastasis □ Micrometastasis □ ITCs □

(Note ITCs only classified as node negative)

Other nodes present: No □ Yes □ Site: .........................

Total present: ..........

Total positive:...........

For single node positive: Macrometastasis □ Micrometastasis □ ITCs □

(Note ITCs only classified as node negative)

*Status of perinodal fat: involved, not involved*

Summary lymph node stage:

1 = Node negative □ 2 = 1–3 nodes positive □ 3 = 4 or more nodes positive □

**Modifications for post neoadjuvant therapy cases**:

**Residual tumour size and extent**

Residual invasive tumour size (mm):...................................

Whole residual tumour (invasive + DCIS) size (mm): ...............................

Disease extent: Localised residual tumour □ Multiple residual invasive foci □

Cannot be assessed □

**Residual invasive tumour type** Pure □ (tick one box below)

Mixed □ (tick all components present below) Not applicable (no residual invasive tumour) □

Tubular/cribriform □ Lobular □ Mucinous □ Medullary-like □ Ductal/NST □ Micropapillary □

Other □ Other type/component: ..........................................................................................

**Residual tumour histological grade**: 1 □ 2 □ 3 □ Cannot be assessed □

**Residual *in situ* components**:

DCIS: Present □ Absent □

DCIS grade: High □ Intermediate □ Low □ Cannot be assessed □

DCIS/pleomorphic or DCIS like LCIS size mm: ...........................................

LCIS: Present □ Not identified □

Paget’s disease: Present □ Not identified □ Cannot be assessed □

Microinvasive: Present □ Not identified □

**Lymphovascular invasion** Present □ Not identified □ Uncertain □

**Post therapy lymph node stage**

Axillary nodes:

Total present: ..........

Total positive: ...........

Other nodes: Site: .........................

Total present: ..........

Total positive:...........

Evidence of treatment response in the metastases: Present □ Absent □

Number of lymph nodes with evidence of treatment response (fibrosis or histiocytic infiltrate)
but no tumour cells: ………

**Final classification of chemotherapy response**

Breast disease response:

1. Complete pathological response, either (i) no residual carcinoma or (ii) no residual invasive tumour but DCIS present □
2. Partial response to therapy □
	1. minimal residual disease/near total effect typically (<10% of tumour remaining in the tumour bed seen as an area of residual fibrosis delineating the original tumour extent) □
	2. Evidence of response but significant tumour remaining (>10% of tumour remaining in the tumour bed seen as an area of residual fibrosis delineating the original tumour extent) □
3. No evidence of response to therapy □

Lymph nodal response:

1. No evidence of metastatic disease and no evidence of changes in the lymph nodes □
2. Metastatic tumour not detected but evidence of response/’down-staging’, e.g. fibrosis □
3. Metastatic disease present but also evidence of response, such as nodal fibrosis □
4. Metastatic disease present with no evidence of response to therapy □

**TNM stage**

T stage: pTis □ pT1mi □ pT1a □ pT1b □ pT1c □ pT2 □ pT3 □ pT4a □ pT4b □

pT4c □ pT4d □ Cannot be assessed □

N stage: pN0 □ pN1mi □ pN1a □ pN1b □ pN1c □ pN2a □ pN2b □ pN3a □ pN3c □

 Cannot be assessed □

M stage: pM1 □ Cannot be assessed □

Note: Add suffix ‘y’ to TNM codes for post neoadjuvant therapy treated cases

**Excision status**

Distance from each margin (mm)

**Invasive tumour** Superior....... Inferior ......... Medial ....... Lateral .......

Deep ....... Superficial ...... Nipple margin....................

**DCIS**  Superior ..... Inferior........ Medial ....... Lateral ....

Deep ...... Superficial ....... Nipple margin ................

**Receptor status**

Oestrogen receptor status: Positive (> or = 1%) □ Negative (<1%) □

% positive tumour cells =………….

On-slide positive control material: Present □ Absent □

*Optional:*

*Allred score (0–8):………………………………………*

*H score (0–300):……………………………………….*

HER2 IHC score: 0 Negative □ 1+ □ Negative □ 2+ Borderline □ 3+ Positive □

FISH/CISH ratio: ...........

Status: Amplified □ Non-amplified □ Borderline □ Not performed □

Her2 copy no: …... Chromosome 17 no: ……

Final HER2 status: Positive □ Negative □

*Optional:*

*Progesterone receptor status: Positive (>1%) □ Negative (<1%) □*

*% positive tumour cells =………….*

*On-slide positive control material: Present □ Absent □*

*Optional:*

*Allred score (0–8):………………………………………*

*H score (0–300):…………………………………………*

*Optional:*

*Proliferation (Ki67) index: .........*

**TNM stage:**

**SNOMED codes**

**T:**

**M:**

**Appendix B RCPath dataset for histopathological reporting of breast cancer surgical resections (*in situ* and invasive disease)**

This section lists the items recognised as core cancer dataset fields. These have been incorporated into a recommended synoptic reporting format in Appendix A.

Surname: ……………………………… Forenames: ………………… Date of birth: ………………

Sex: ….……. Hospital:……………….. …………….….. Hospital/CHI no: ………………….………..

NHS no: ………………………… Date of surgery: ……………….………… Date of report ………..

Authorisation: …………….. Report no: ……………………….Date of receipt:……………………...

Pathologist: …………….………………………... Surgeon: ……………………………………….. …

**Surgical specimen(s)**

Is there a history of neo-adjuvant therapy?\* Yes □ No □ Not known □

Side:\* Right □ Left □

Specimen type:\*

WLE □ Excision biopsy □ Localisation specimen □ Segmental excision □

Mastectomy □ Subcutaneous mastectomy □

Re-excision □ Further margins (including cavity shaves/bed biopsies)

Microdochectomy/microductectomy □

SLN □ Axillary sampling □ Axillary LN level I □

Axillary LN level II □ Axillary LN level III □ Total duct excision/Hadfield’s procedure □

Other ..........................................................

Specimen weight (g) ..........................................

**Malignant lesions**

**Malignant *in situ* lesion:**

***In situ* components**:

DCIS grade:\* High □ Intermediate □ Low □ Cannot be assessed □

DCIS/pleomorphic or DCIS like LCIS size mm: ...........................................

LCIS: Present □ Not identified □

Paget’s disease: Present □ Not identified □ Cannot be assessed □

Microinvasive: Present □ Not identified □

**Invasive carcinoma**

**Size and extent**

Invasive tumour size (mm): \* ...................................

Whole tumour (invasive + DCIS) size (mm): \* ...............................

Disease extent:\* Localised □ Multiple invasive foci □ Cannot be assessed □

**Invasive tumour type\*** Pure □ (tick one box below) Mixed □ (tick all components present below)

Tubular/cribriform □ Lobular □ Mucinous □ Medullary-like □ Ductal/NST □ Micropapillary □

Other □ Other type/component: ..........................................................................................

**Histological grade\*** 1 □ 2 □ 3 □ Cannot be assessed □

**Lymphovascular invasion\*** Present □ Not identified □ Uncertain □

**Lymph node stage**

Axillary nodes:

Total present: ..........

Total positive: ...........

For single node positive: Macrometastasis □ Micrometastasis □ ITCs □

(Note ITCs only classified as node negative)

Other nodes: Site: .........................

Total present: \* ..........

Total positive:.\* ..........

For single node positive: Macrometastasis □ Micrometastasis □ ITCs □

(Note ITCs only classified as node negative)

Summary lymph node stage: 1 = Node negative □ 2 = 1–3 nodes positive □

3 = 4 or more nodes positive □

**Modifications for post neoadjuvant therapy cases (replacing above)**

**Residual tumour size and extent**

Residual invasive tumour size (mm): \* ...................................

Whole residual tumour (invasive + DCIS) size (mm): \* ...............................

Residual disease extent:\* Localised residual tumour □ Multiple residual invasive foci □

 Cannot be assessed □

**Residual invasive tumour type\***

Pure □ (tick one box below)

Mixed □ (tick all components present below) Not applicable (no residual invasive tumour) □

Tubular/cribriform □ Lobular □ Mucinous □ Medullary-like □ Ductal/NST □ Micropapillary □

Other □ Other type/component: ..........................................................................................

**Residual tumour histological grade**:\* 1 □ 2 □ 3 □ Cannot be assessed □

**Residual *in situ* components**:

DCIS: Present □ Absent □

DCIS grade:\* High □ Intermediate □ Low □ Cannot be assessed □

DCIS/pleomorphic or DCIS like LCIS size mm: ...........................................

LCIS: Present □ Not identified □

Paget’s disease: Present □ Not identified □ Cannot be assessed □

Microinvasive: Present □ Not identified □

**Lymphovascular invasion\*** Present □ Not identified □ Uncertain □

**Post therapy lymph node stage**

Axillary nodes:

Total present:\* ..........

Total positive:\* ...........

Other nodes: Site: .........................

Total present: ..........

Total positive:...........

Evidence of treatment response in the metastases: Present □ Not identified □

Number of lymph nodes with evidence of treatment response (fibrosis or histiocytic infiltrate)
but no tumour cells: ………

**Final classification of chemotherapy response**

Breast disease response:

1. Complete pathological response, either (i) no residual carcinoma or (ii) no residual invasive tumour but DCIS present □
2. Partial response to therapy □
	1. minimal residual disease/near total effect typically (<10% of tumour remaining in the tumour bed seen as an area of residual fibrosis delineating the original tumour extent) □
	2. Evidence of response but significant tumour remaining (>10% of tumour remaining in the tumour bed seen as an area of residual fibrosis delineating the original tumour extent) □
3. No evidence of response to therapy □

Lymph nodal response:

1. No evidence of metastatic disease and no evidence of changes in the lymph nodes □
2. Metastatic tumour not detected but evidence of response/’down-staging’, e.g. fibrosis □
3. Metastatic disease present but also evidence of response, such as nodal fibrosis □
4. Metastatic disease present with no evidence of response to therapy □

**TNM stage:**

See Appendix D for relevant codes

Note: Add suffix ‘y’ to TNM codes for post neoadjuvant therapy treated cases.

**Excision status**

Excision margins:\* Involved □ Not involved □

Distance from each margin (mm) \* ………

**Invasive tumour** Superior....... Inferior ..... Medial ..... Lateral ......

Deep ..... Superficial ..... Nipple Margin.................

**DCIS/pleomorphic and DCIS like LCIS** Superior …... Inferior….. Medial ..... Lateral …..

Deep ..... Superficial ..... Nipple Margin ................

**Receptor status**

Oestrogen receptor status:\* Positive (> or = 1%) □ Negative (<1%) □

% positive tumour cells =……………..

On-slide positive control material: Present □ Absent □

HER2 IHC score:\* 0 Negative □ 1+ Negative □ 2+ Borderline □ 3+ Positive □

FISH/CISH ratio: ...........

Status:\* Amplified □ Non-amplified □ Borderline □ Not performed □

HER2 copy no: ……… Chromosome 17 no: ………..

Final HER2 status:\* Positive □ Negative □

**SNOMED codes\***

**T:**

**M:**

**\*** Data items which are currently part of the Cancer Outcomes and Services Dataset (COSD) version 6.