A guide to

Soft Tissue Tumour Resection Histopathology Reporting

Clinical details

S1.02	**Pathology accession number**	Text
S1.03	**Principal clinician**	Text
S1.04	**Type of specimen**	See p2
S1.05	**Anatomical site**	Text
S1.06	**Laterality**	Left Right N/A Not stated
G1.02	Clinical or differential diagnosis	Text
S1.07	**Details of any neoadjuvant therapy**	Text Not stated
G1.03	Details of any relevant imaging	Text
G1.04	Details of previous biopsy	Text
G1.05	Details of known sites of disease/ metastasis	Text
S1.08	**Operative findings**	Provided Not provided
	If provided, record...	
	Tumour extent	Text
	All visible tumour resected	Yes No Not stated
	Other relevant information	Text
G1.06	Details of relevant family history/ pre-disposing factors	Text

Macroscopic findings

S2.04	**Measurements of specimen**	__x__x__mm
S2.05	**Measurements of tumour**	__x__x__mm
G2.04	Distance from tumour to margins:	
	Closest margin	Text
	Distance to closest margin	___ mm
	Other margin (specify each)	Text
	Distance to other margin(s)	___ mm
G2.05	Nature of tissue between tumour and closest margin	Fat Muscle Fascia
	Nature of tumour interface with normal tissue (eg infiltrative, well circumscribed or encapsulated)	Text
G2.06	Appearance of cut surface tumour: Description	Text
	Haemorrhage	Absent Present
	Necrosis	Not identified Present
	If present, record percent of tumour volume	___% (est.)
S2.06	**Lymph nodes**	Site(s) Nodes per site
G2.08	Other macroscopic comment	Text

Microscopic findings

S3.01	**Tumour site**	Text
	Tumour depth – tissue plane	See p2
	Tumour depth (if possible)	___mm Not possible
G3.01	Tumour description (eg cellularity, growth pattern etc)	Text
G3.02	Mitotic rate	___ per10hpf
G3.03	Necrosis	Not identified Present
	If present, record percent of tumour volume	___% (est.)
S3.02	**Histologic type (WHO)**	Text Typing not possible
	Subtype	Text
G3.04	Pre-existing benign lesion (nerve sheath tumours)	Absent Present
S3.03	**Distance from close surgical margins**	
	For *each* margin record:	
	Type of margin	Text
	Distance from margin	___mm
	Nature of tissue at margin	Text
S3.04	**Vascular invasion**	Not identified Present
S3.05	**Lymph node involvement by tumour**	Not applicable Applicable
	If applicable, for *each location*, specify:	
	Number of nodes involved by tumour	___
	Total number of nodes resected	___
S3.06	**Bone invasion**	Absent Present Not applicable
G3.05	Tumour regression (where neoadjuvant chemo/radiotherapy administered)	Absent Present
	If present, record percent of tumour regression	___% (est.)
G3.06	Diagnostic SNOMED coding	Text
G3.07	Additional microscopic comments	Text

Ancillary test findings

G4.01	Immunohistochemistry, record	Each antibody Result Interpretation Clin. significance
G4.02	Cytogenetic analysis, record	Performing lab Result Conclusion Person reporting
G4.03	Molecular genetic analysis, record	Performing lab Substrate Method Result Conclusion Person reporting

Ancillary test findings (cont.)		
G4.04	Electron microscopy, record	Performing lab Result Conclusion Person reporting

Synthesis and overview		
S5.01	**AJCC tumour stage**	See p2
S5.02	**Year of publication & edition of cancer staging system**	Text
S5.03	**Tumour grading (FNCLCC) (adult STS)**	See p2 Grading not possible
	If grading is not possible include a general statement	Text
S5.04	**Tumour grading (COG)** (non-rhabdomyosarcomatous paediatric sarcoma other than Ewing's/ PNET)	Grade 1 Grade 2 Grade 3 Grading not possible
S5.05	**Intergroup Rhabdomyosarcoma Study classification** (paediatric rhabdomyosarcoma)	See p2 Grading not possible
G5.01	Sent for specialist soft tissue review (give details)	Text
G5.02	Diagnostic summary (Include: Specimen type; Tumour - site, laterality, size, type, grade, stage; Completeness of excision; Prognostically important ancillary results; Assessment of response to neoadjuvant therapy)	Text
S5.06	**Other relevant comments**	Text

NOTES

S1.04 Type of specimen

- wide local excision
- compartmentectomy
- radical excision
- pelvic exenteration
- amputation (state type)
- other (specify)

S3.01 Tumour depth - tissue plane

- dermis
- subcutis/superficial to deep fascia
- subfascial
- intramuscular
- other (specify)

S5.05 Intergroup Rhabdo. Study

Tumour classification*

Embryonal, botryoid (favourable prognosis)
Embryonal, spindle cell (favourable prognosis)
Embryonal, NOS (intermediate prognosis)
Alveolar, NOS or solid variant (poor prognosis)
Anaplasia, diffuse (poor prognosis)
Undifferentiated sarcoma (poor prognosis)

Tumour site

Orbit
Head and neck
Bladder/prostate
Extremity
Cranial parameningeal
Other (specify)

PAX fusion type **Text**

*Reproduced with permission Qualman S, Coffin C and Newton W et al (1998). Intergroup rhabdomyosarcoma study: Update for pathologists. Ped Developmental Pathol 1(6):550-561

S5.01 AJCC Tumour stage##

Primary Tumour (T)

TX Primary tumour cannot be assessed
T0 No evidence of primary tumour
T1 Tumour 5 cm or less in greatest dimension*
T1a Superficial tumour
T1b Deep tumour
T2 Tumour more than 5 cm in greatest dimension*
T2a Superficial tumour
T2b Deep tumour
* Note: Superficial tumour is located exclusively above the superficial fascia without invasion of the fascia; deep tumour is located either exclusively beneath the superficial fascia, superficial to the fascia with invasion of or through the fascia, or both superficial yet beneath the fascia.

Regional Lymph Nodes (N)

NX Regional lymph nodes cannot be assessed
N0 No regional lymph node metastasis
N1* Regional lymph node metastasis
* Note: Presence of positive nodes (N1) in M0 tumours is considered Stage III

Distant Metastasis (M)

M0 No distant metastasis
M1 Distant metastasis

Anatomic Stage/Prognostic groups

GROUP	T	N	M	Grade
Stage IA	T1a	N0	M0	G1, GX
	T1b	N0	M0	G1, GX
Stage IB	T2a	N0	M0	G1, GX
	T2b	N0	M0	G1, GX
Stage IIA	T1a	N0	M0	G2, G3
	T1b	N0	M0	G2, G3
Stage IIB	T2a	N0	M0	G2
	T2b	N0	M0	G2
Stage III	T2a	N0	M0	G3
	T2b	N0	M0	G3
	Any T	N1	M0	Any G
Stage IV	Any T	Any N	M1	Any G

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S5.03 FNCLCC grading system**

Tumour differentiation

Score 1: sarcomas closely resembling normal adult mesenchymal tissue (e.g., low grade leiomyosarcoma).

Score 2: sarcomas for which histological typing is certain (e.g., myxoid iposarcoma).

Score 3: embryonal and undifferentiated sarcomas, sarcomas of doubtful type, synovial sarcomas, osteosarcomas, PNET.

Mitotic Count

Score 1: 0-9 mitoses per 10 HPF*
Score 2: 10-19 mitoses per 10 HPF
Score 3: ≥20 mitoses per 10 HPF

Tumour necrosis

Score 0: no necrosis
Score 1: <50% tumour necrosis
Score 2: ≥50% tumour necrosis

Histological grade

Grade 1: total score 2, 3
Grade 2: total score 4, 5
Grade 3: total score 6, 7, 8

**Modified with permission from Trojani M, Contesso G, Coindre JM, Rouesse J, Bui NB, de Mascarel A, Goussot JF, David M, Bonichon F and Lagarde C (1984). Soft-tissue sarcomas of adults; study of pathological prognostic variables and definition of a histopathological grading system. Int J Cancer 33:37-42.