Sponsored by

Paediatric Rhabdomyosarcoma Histopathology Reporting Guide

Family/Last name

Given name(s)

Date of birth DD – MM – YYYY

Patient identifiers

Date of request DD – MM – YYYY

Accession/Laboratory number

Elements in **black text** are CORE. Elements in grey text are NON-CORE.

SCOPE OF THIS DATASET

☐ indicates multi-select values ◯ indicates single select values

CLINICAL INFORMATION

◯ Information not provided

Preoperative treatment (select all that apply)

◯ Information not provided
◯ No known preoperative therapy
☐ Chemotherapy given
☐ Radiotherapy given
☐ Other, *specify*

First known cancer

◯ Yes
◯ No, *specify previous tumour(s)*

Known cancer predisposition syndrome, *specify*

Other clinical information, *specify*

OPERATIVE PROCEDURE (select all that apply)

◯ Not specified
☐ Biopsy
☐ Intralesional excision
☐ Marginal resection
☐ Wide local resection
☐ Radical resection
☐ Amputation, *specify*
☐ Other, *specify*

TUMOUR SITE

◯ Not specified
◯ Unknown primary site
◯ Bile duct
◯ Bladder/prostate
◯ Parameningeal
◯ Extremity
◯ Orbit
◯ Head and neck (excluding parameningeal), *specify*
◯ Genitourinary (excluding bladder/prostate), *specify*
◯ Other, *specify*

TUMOUR LATERALITY

◯ Left
◯ Right
◯ Not specified

TUMOUR DIMENSIONS

(Applicable for excision biopsies and resection specimens)

Greatest dimension mm

Additional dimensions mm x mm

◯ Cannot be assessed, *specify*

BLOCK IDENTIFICATION KEY

(List overleaf or separately with an indication of the nature and origin of all tissue blocks)

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HISTOLOGICAL TUMOUR TYPE (select all that apply)
(Value list based on the World Health Organization Classification of Paediatric Tumours (2023))

- ☐ Embryonal rhabdomyosarcoma
- ☐ Alveolar rhabdomyosarcoma
- ☐ Pleomorphic rhabdomyosarcoma
- ☐ Spindle cell/sclerosing rhabdomyosarcoma
- ☐ Other, *specify*

ANAPLASIA
(Applicable for biopsy or post-treatment resection specimens)

- ◯ Cannot be determined
- ◯ Not identified
- ◯ Present
  - ◯ Focal
  - ◯ Diffuse

  OR

  % of cells

OTHER HISTOLOGICAL FEATURES

- ◯ None identified
- ◯ Present, *specify*

TREATMENT EFFECT

- ◯ No previous treatment
- ◯ No response
- ◯ Response

  Microscopic viable tumour %

  Rhabdomyoblastic differentiation
  - ◯ Not identified
  - ◯ Present

    % differentiation

MARGIN STATUS
(Applicable for resection specimens only)

- ◯ Cannot be assessed
- ◯ Not involved

  Distance of tumour from closest margin mm

  Specify closest margin(s) (<10 mm), if possible
- ◯ Involved

  Specify margin(s), if possible

LYMPHOVASCULAR INVASION

- ◯ Not identified
- ◯ Present

LYMPH NODE STATUS

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

Number of lymph nodes examined

- ◯ Not involved
- ◯ Involved

  Number of involved lymph nodes

  ◯ Number cannot be determined

  Location of involved lymph nodes, *specify*

ANCILLARY STUDIES

- ◯ Not performed
- ◯ Performed

Immunohistochemistry

- ◯ Not performed
- ◯ MyoD1
  - ◯ Negative
  - ◯ Positive

    %
- ◯ Myogenin
  - ◯ Negative
  - ◯ Positive

    %
- ◯ Desmin
  - ◯ Negative
  - ◯ Positive
- ◯ Other, *specify test(s) and result(s)*

Gene fusion studies

- ◯ Not performed
- ◯ Pending
- ◯ No *FOXO1* rearrangement
- ◯ *FOXO1* rearrangement present, fusion partner not known
- ◯ *PAX3::FOXO1* gene fusion
- ◯ *PAX7::FOXO1* gene fusion
- ◯ Other rearrangement/fusion, *specify*

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ANCILLARY STUDIES continued

Molecular genetic studies

- ◯ Not performed
- ◯ Pending
- ◯ *MYOD1* L122R mutation
- ◯ *VGLL2/NCOA2* gene fusions, *specify*
- ◯ *EWSR1/FUS-TFCP2* gene fusion, *specify*
- ◯ TP53
- ◯ *DICER1* mutation
- ◯ Other, *specify test(s) and result(s)*

Representative blocks for ancillary studies, *specify those blocks best representing tumour and/or normal tissue for further study*

HISTOLOGICALLY CONFIRMED DISTANT METASTASES

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

PATHOLOGICAL STAGING[a]

(Applicable for resection specimens only)

Pathologic staging system used[b]

- ◯ Children's Oncology Group (COG)
- ◯ TNM

Children's Oncology Group (COG) staging[c]

- ◯ Stage I — Requires all of the following to be true: Tumour involves favourable site (i.e., orbit, head and neck [excluding parameningeal] or genitourinary site [excluding bladder/prostate]), and; Tumour metastatic to distant site not identified
- ◯ Stage II — Requires all of the following to be true: Tumour involves unfavourable site (i.e., bladder/prostate, extremity, parameningeal or other site not mentioned in stage I), and; Tumour size ≤5 cm, and; Tumour involvement of lymph nodes not identified, and; Tumour metastatic to distant site not identified
- ◯ Stage III — Requires that one of the following be true: Tumour involves unfavourable site, is ≤5 cm, and involves regional lymph nodes, but distant metastases are not identified, or; Tumour involves unfavourable site and is >5 cm, with or without regional lymph node involvement, but distant metastases are not identified

TNM staging (UICC TNM 8th edition 2016)[d]

TNM Descriptor (only if applicable)

- ◯ y - post-therapy

Primary tumour (pT)

- ◯ pT0 — No evidence of tumour found on histological examination of specimen
- ◯ pT1 — Tumour limited to organ or tissue of origin Excision complete and margins histologically free
- ◯ pT2 — Tumour with invasion beyond the organ or tissue of origin Excision complete and margins histologically free
- ◯ pT3 — Tumour with or without invasion beyond the organ or tissue of origin Excision incomplete
  - ◯ pT3a Evidence of microscopic residual tumour
  - ◯ pT3b Evidence of macroscopic residual tumour
  - ◯ pT3c Adjacent malignant effusion regardless of size
- ◯ pTX[e] — Tumour status may not be assessed

Regional lymph nodes (pN)

- ◯ pN0 — No evidence of tumour found on histological examination of regional lymph nodes
- ◯ pN1 — Evidence of invasion of regional lymph nodes
  - ◯ pN1a Evidence of invasion of regional lymph nodes Involved nodes considered to be completely resected
  - ◯ pN1b Evidence of invasion of regional lymph nodes Involved nodes considered not to be completely resected
- ◯ pNX[e,f] — N status may not be assessed due to lack of pathological examination or inadequate information on pathological findings

[a] *Core for primary resection specimens (if using COG staging it is core if clinical information is available); non-core for post-treatment resection specimens.*

[b] *Either COG or TNM can be used depending on local preference.*

[c] *Reprinted from Pediatr Blood Cancer., Volume 69(6), Crane JN, Xue W, Qumseya A,et al. Clinical group and modified TNM stage for rhabdomyosarcoma: A review from the Children's Oncology Group, 2022, with permission from Wiley.*

[d] *Reproduced with permission. Source: UICC TNM Classification of Malignant Tumours, 8th Edition, eds by James D. Brierley, Mary K. Gospodarowicz, Christian Wittekind. 2016, Publisher Wiley (incorporating any errata published up until 25th January 2022).*

[e] *pTX and pNX should be used only if absolutely necessary.*

[f] *For evaluations pNX will be regarded as N0.*

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