Sponsored by

Paediatric Renal Tumours 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.

☐ indicates multi-select values ◯ indicates single select values

SCOPE OF THIS DATASET

Protocol followed

- ◯ Children's Oncology Group (COG)
- ◯ International Society of Paediatric Oncology (SIOP)
- ◯ Not known

PREVIOUS THERAPY

- ◯ Information not provided
- ◯ No previous chemotherapy administered
- ◯ Previous chemotherapy administered
  - Clinical information guiding previous therapy, *specify if available*

OPERATIVE PROCEDURE

- ◯ Not specified
- ◯ Enucleation
- ◯ Partial nephrectomy
- ◯ Total or radical nephrectomy
- ◯ Other, *specify*

PREOPERATIVE RUPTURE OR INTRAOPERATIVE SPILLAGE

- ◯ Not identified
- ◯ Identified
- ◯ Cannot be determined, *specify*

ACCOMPANYING/ATTACHED STRUCTURES
(select all that apply)

- ◯ Not submitted
- ☐ Adrenal gland
- ☐ Other, *specify*

SPECIMEN LATERALITY

- ◯ Not specified/Not applicable
- ◯ Left
- ◯ Right
- ◯ Other (e.g., horseshoe kidney, single kidney), *specify*

SPECIMEN WEIGHT

g

◯ Cannot be assessed

TUMOUR FOCALITY

- ◯ Cannot be determined
- ◯ Unifocal
- ◯ Multifocal
  - Specify number of tumours

TUMOUR DIMENSIONS[a]

Nodule 1

Greatest dimension mm

Additional dimensions mm x mm

Nodule 2

Greatest dimension mm

Additional dimensions mm x mm

◯ Cannot be assessed, *specify*

[a] *Specify for each nodule, or for the two nodules that determine the stage and/or histologic classification.*

Version 1.0 Published November 2023 ISBN: 978-1-922324-40-5

BLOCK IDENTIFICATION KEY

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

RENAL SINUS INVOLVEMENT (select all that apply)

- ◯ Cannot be determined
- ◯ Not identified
- ☐ Renal sinus vessel involvement by viable tumour with negative margin[b]
- ☐ Invasion of the wall of the ureter or collecting system outside of the kidney by viable tumour (but completely resected with negative margin)[b]
- ☐ More than minimal renal sinus soft tissue invasion present (but completely resected with negative margin)[b]
- ☐ Minimal renal sinus soft tissue invasion by viable tumour present (<5 mm in greatest dimension and >5 mm from a margin)[c]

[b] *Criteria for local stage II by both COG and SIOP.*

[c] *Allowed within local stage I by COG, considered stage II by SIOP.*

RENAL CAPSULE PENETRATION

- ◯ Cannot be assessed
- ◯ No viable tumour outside the renal capsule
- ◯ Viable tumour outside the renal capsule (including adrenal gland) that **is not** surrounded by a fibrous pseudocapsule, with negative margins[d]
- ◯ Viable tumour outside the renal capsule or within the adrenal gland that **is** surrounded by a fibrous pseudocapsule, with negative margins[e]

[d] *Supports local stage II by SIOP and COG.*

[e] *Supports local stage II for COG; allowed within local stage I for SIOP.*

PRIMARY TUMOUR EXCISED IN ONE PIECE

- ◯ Cannot be assessed
- ◯ Tumour excised in one piece
- ◯ Tumour excised in more than one piece[f]

[f] *Applicable only for COG staging, for which excision in more than one piece supports local stage III.*

NEPHROGENIC RESTS[g]

- ◯ Cannot be assessed
- ◯ Not identified
- ◯ Present (select all that apply)
  - ☐ Intralobar
    - ◯ Single
    - ◯ Multiple
  - ☐ Perilobar
    - ◯ Single
    - ◯ Multiple
    - ◯ Diffuse, hyperplastic
  - ☐ Unclassified

[g] *Nephrogenic rests are not included in staging criteria.*

HISTOLOGICAL TUMOUR TYPE

(Value list based on the World Health Organization Classification of Paediatric Tumours (2023))

- ◯ Wilms tumour (nephroblastoma)
  - ◯ Favourable histology
  - ◯ Focal anaplasia
  - ◯ Diffuse anaplasia
- ◯ Nephrogenic rest only (without Wilms tumour)
  - ◯ Intralobar
  - ◯ Perilobar
- ◯ Mesoblastic nephroma
  - ◯ Cellular
  - ◯ Classic
  - ◯ Mixed
- ◯ Paediatric cystic nephroma
- ◯ Cystic partly differentiated nephroblastoma
- ◯ Metanephric stromal tumour
- ◯ Metanephric adenoma
- ◯ Metanephric adenofibroma
- ◯ Ossifiying renal tumour of infancy
- ◯ Clear cell sarcoma of the kidney
- ◯ Rhabdoid tumour of the kidney
- ◯ Anaplastic sarcoma of the kidney (DICER-1 associated)
- ◯ Other, *specify*

POST-THERAPY HISTOLOGICAL CLASSIFICATION OF WILMS TUMOUR

- ◯ Not applicable[h]

Low risk tumours

- ◯ Completely necrotic (100% necrosis although residual tubules from nephrogenic rests may be present)

Intermediate risk tumours

- ◯ Favourable histology, epithelial type (≤66% necrosis; >66% of viable component epithelial and <10% blastema)
- ◯ Favourable histology stromal type (≤66% necrosis; >66% of viable component stromal and <10% blastemal)
- ◯ Favourable histology mixed type (≤66% necrosis with viable component containing at least two components, none of which comprise more than two thirds of the viable tumour, or tumours that are 10-66% blastemal)
- ◯ Favourable histology, regressive type (66-99% necrosis)
- ◯ Focal anaplasia (except blastemal type)[i]

High risk tumours

- ◯ Blastemal type (≤66% necrosis with >66% viable blastemal component)
- ◯ Diffuse anaplasia[i]

[h] *Not post-therapy or not Wilms tumour.*

[i] *Focal and diffuse anaplasia are included in the post-therapy risk stratification by SIOP, but are treated by separate clinical protocols by COG.*

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MARGIN STATUS

- ◯ Cannot be assessed
- ◯ Not involved
  - Distance of viable tumour from closest margin: ____ mm
  - Specify closest margin(s), if possible: ____
- ◯ Involved by viable tumour[j] (select all that apply)
  - ☐ Renal vein margin
  - ☐ Ureteral margin
  - ☐ Inked soft tissue or parenchymal margin
  - ☐ Other, *specify*: ____
- ◯ Involved by non-viable tumour (select all that apply)
  - ☐ Renal vein margin[j]
  - ☐ Ureteral margin[j]
  - ☐ Inked soft tissue or parenchymal margin[k]
  - ☐ Other, *specify*: ____
- ◯ Presence of viable or non-viable tumour in peritoneal or abdominal or pelvic nodules or implants[j]

[j] *Supports local stage III by both COG and SIOP.*

[k] *Supports local stage III by COG, but not by SIOP.*

LYMPH NODE STATUS

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

Number of lymph nodes examined: ____

- ◯ Not involved
- ◯ Involved (viable or non-viable tumour)[j]
  - Number of involved lymph nodes: ____
  - ◯ Number cannot be determined
  - Location of involved lymph nodes (select all that apply)
    - ☐ Regional
    - ☐ Non-regional (outside the abdomino-pelvic region)

COEXISTENT PATHOLOGY

- ◯ None identified
- ◯ Present, *specify*: ____

ANCILLARY STUDIES

- ◯ Not performed
- ◯ Performed (select all that apply)
  - ☐ Immunohistochemistry, *specify test(s) and result(s)*: ____
  - ☐ Molecular genetic testing, *specify test(s) and result(s)*: ____
  - ☐ Other, *record test(s), methodology and results*: ____

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

HISTOLOGICALLY CONFIRMED DISTANT METASTASIS

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

PATHOLOGICAL STAGING

Pathologic staging system used

- ◯ Children's Oncology Group (COG)
- ◯ International Society of Paediatric Oncology (SIOP)

Local stage (based on the data elements for each stage)

◯ Local stage I	All staging elements are consistent with local stage I, and none indicate local stages II or III
◯ Local stage II	Presence of any staging element supporting local stage II and no parameters for local stage III
◯ Local stage III	Presence of any staging element for local stage III
◯ Local stage not determined	

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