**Invasive Carcinoma of Renal Tubular Origin**

**Histopathology Reporting Guide**

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<thead>
<tr>
<th>Family/Last name</th>
<th>Date of birth</th>
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<tr>
<th>Given name(s)</th>
<th>Patient identifiers</th>
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<tr>
<th>Date of request</th>
<th>Accession/Laboratory number</th>
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Elements in **black text** are REQUIRED. Elements in **grey text** are RECOMMENDED.

### PRE-OPERATIVE TREATMENT

- Tumour embolization
- Cryoablation
- Radio frequency ablation
- External-beam radiation therapy (EBRT)
- Other, specify

### SPECIMEN LATERALITY

- Left
- Right
- Other eg horseshoe kidney, specify

### OPERATIVE PROCEDURE

- Radical nephrectomy
- Simple nephrectomy
- Partial nephrectomy
- Other, specify

### ACCOMPANYING/ATTACHED STRUCTURES

- Adrenal gland, None submitted
- Lymph nodes, provide details
- Other organs, provide details

### TISSUE REMOVED FROM SPECIMEN PRIOR TO SUBMISSION

- No
- Yes, provide details

### TUMOUR SITE(S)

- Upper pole
- Mid zone
- Lower pole
- Cortex
- Medulla
- Other, specify

### TUMOUR FOCALITY

- Unifocal
- Multifocal

**Specify number of tumours (if possible)**

### MAXIMUM TUMOUR DIMENSION

(If multiple tumours the maximum dimension of the largest five should be recorded.)

- Tumour 1: mm
- Tumour 2: mm
- Tumour 3: mm
- Tumour 4: mm
- Tumour 5: mm

### HISTOLOGICAL TUMOUR GRADE - WHO/ISUP

- Not applicable
- Grade X - Cannot be assessed
- Grade 1 - Nucleoli absent or inconspicuous and basophilic at 400x magnification
- Grade 2 - Nucleoli conspicuous and eosinophilic at 400x magnification, visible but not prominent at 100x magnification
- Grade 3 - Nucleoli conspicuous and eosinophilic at 100x magnification
- Grade 4 - Extreme nuclear pleomorphism and/or multinucleated giant cells and/or rhabdoid and/or sarcomatoid differentiation
**HISTOLOGICAL TUMOUR TYPE**
(Value list from the World Health Organization Classification of Tumours of the Urinary System and Male Genital Organs, Fourth edition (2016) classification of renal cell tumours and the International Society of Urological Pathology Vancouver classification of renal neoplasia)

**Occasionally more than one histologic type of carcinoma occurs within the same kidney specimen. Each tumour type should be separately recorded.**

- Clear cell renal cell carcinoma
- Multilocular clear cell renal cell neoplasm of low malignant potential
- Papillary renal cell carcinoma
  - Type 1
  - Type 2
  - Oncocytic
  - NOS
- Chromophobe renal cell carcinoma
  - Hybrid oncocytic chromophobe tumour
- Collecting duct carcinoma
- Renal medullary carcinoma
- MiT family translocation renal cell carcinoma
  - Xp11 translocation renal cell carcinoma
  - t(6;11) renal cell carcinoma
  - Other, specify
- Mucinous tubular and spindle cell carcinoma
- Tubulocystic renal cell carcinoma
- Acquired cystic disease associated renal cell carcinoma
- Clear cell papillary/tubulopapillary renal cell carcinoma
- Hereditary leiomyomatosis and renal cell carcinoma-associated renal cell carcinoma
- Succinate dehydrogenase (SDH) deficient renal carcinoma
- Renal cell carcinoma, unclassified
  - Other, specify

**SARCOMATOID MORPHOLOGY**
- Not identified
- Present
  - Extent of sarcomatoid component

**RHABDOID MORPHOLOGY**
- Not identified
- Present
  - Extent of rhabdoid component

**NECROSIS**
- Not identified
- Present
  - Microscopic coagulative necrosis
  - Macroscopic tumour necrosis
  - Extent of necrosis
    (Applicable to clear cell renal cell carcinoma only)

**EXTENT OF INVASION**
- Tumour limited to the kidney
- Tumour spread beyond renal capsule
  - Not identified
  - Present
  - Cannot be assessed
- Tumour in renal sinus
  - Not identified
  - Cannot be assessed
  - Present in fat
  - Present in vascular spaces
  - Present in fat and vascular spaces
- Tumour extends beyond Gerota’s fascia
  - Not identified
  - Present
  - Cannot be assessed
- Tumour in major veins (renal vein or its segmental branches, inferior vena cava)
  - Not identified
  - Present
  - Cannot be assessed
- Tumour in renal vein wall
  - Not identified
  - Present
  - Cannot be assessed
- Tumour in pelvicalyceal system
  - Not identified
  - Present
  - Cannot be assessed
- Tumour in adrenal gland
  - Not provided
  - Cannot be assessed
- Tumour in other organs/structures
  - Not provided
  - Cannot be assessed
  - Present
  - Specify sites

**LYMPHOVASCULAR INVASION**
- Not identified
- Present

**LYMPH NODES STATUS**
- Number of lymph nodes examined
- Number of positive lymph nodes
  - OR
  - Number cannot be determined
- Size of largest focus
  - mm
- Extranodal extension
  - Not identified
  - Present
  - Cannot be assessed
### MARGIN STATUS
- [ ] Cannot be assessed
- [ ] Not involved
- [ ] Involved

Specify sites (select all that apply)
- [ ] Renal parenchymal margin (partial nephrectomy only)
- [ ] Renal capsular margin (partial nephrectomy only)
- [ ] Perinephric fat margin (partial nephrectomy only)
- [ ] Gerota’s fascial margin
- [ ] Renal vein margin
- [ ] Ureteral margin
- [ ] Other, specify

### CO-EXISTING PATHOLOGY IN NON-NEOPLASTIC KIDNEY
- [ ] None identified
- [ ] Insufficient tissue for evaluation (<5 mm tissue adjacent to the tumour)

#### Glomerular disease

Specify type

#### Tubulointerstitial disease

Specify type

#### Vascular disease

Specify type

#### Cyst(s)

Specify type

#### Tubular (papillary) adenoma(s)

Specify

### ANCILLARY STUDIES
- [ ] Not performed
- [ ] Performed

Specify test and results

### PATHOLOGICAL STAGING (TNM 8th edition)##

#### TNM descriptors (if applicable)
- [ ] m - multiple primary tumours at a single site
- [ ] r - recurrent tumours after a disease free period
- [ ] y - classification is performed during or following multimodality treatment

#### Primary tumour (pT)
- [ ] TX Primary tumour cannot be assessed
- [ ] T0 No evidence of primary tumour
- [ ] T1 Tumour ≤ 7 cm in greatest dimension, limited to the kidney
- [ ] T1a Tumour ≤ 4 cm in greatest dimension, limited to the kidney
- [ ] T1b Tumour > 4 cm but ≤ 7 cm in greatest dimension, limited to the kidney
- [ ] T2 Tumour > 7 cm in greatest dimension, limited to the kidney
- [ ] T2a Tumour > 7 cm but ≤ 10 cm in greatest dimension, limited to the kidney
- [ ] T2b Tumour > 10 cm, limited to the kidney
- [ ] T3 Tumour extends into major veins or perinephric tissues, but not into the ipsilateral adrenal gland and not beyond Gerota’s fascia
- [ ] T3a Tumour extends into the renal vein or its segmental branches, or invades pelvicalyceal system, or invades perirenal and/or renal sinus fat but not beyond Gerota’s fascia
- [ ] T3b Tumour extends into the vena cava below the diaphragm
- [ ] T3c Tumour extends into the vena cava above the diaphragm or invades the wall of the vena cava
- [ ] T4 Tumour invades beyond Gerota’s fascia (including contiguous extension into the ipsilateral adrenal gland)

#### Regional lymph nodes (pN)
- [ ] NX Regional lymph nodes cannot be assessed.
- [ ] N0 No regional lymph node metastasis
- [ ] N1 Metastasis in regional lymph node(s)

#### Distant metastasis (pM)
- [ ] Not applicable
- [ ] M1 Distant metastasis