

# Kidney

**Protocol applies to all invasive carcinomas of renal tubular origin. It excludes Wilms tumors and tumors of urothelial origin.**

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*Protocol revision date: January 2005  
Based on AJCC/UICC TNM, 6<sup>th</sup> edition*

## **Procedures**

- **Incisional Biopsy (Needle or Wedge)**
- **Partial Nephrectomy**
- **Radical Nephrectomy**

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The College of American Pathologists offers these protocols to assist pathologists in providing clinically useful and relevant information when reporting results of surgical specimen examinations of surgical specimens. The College regards the reporting elements in the "Surgical Pathology Cancer Case Summary (Checklist)" portion of the protocols as essential elements of the pathology report. However, the manner in which these elements are reported is at the discretion of each specific pathologist, taking into account clinician preferences, institutional policies, and individual practice.

The College developed these protocols as an educational tool to assist pathologists in the useful reporting of relevant information. It did not issue the protocols for use in litigation, reimbursement, or other contexts. Nevertheless, the College recognizes that the protocols might be used by hospitals, attorneys, payers, and others. Indeed, effective January 1, 2004, the Commission on Cancer of the American College of Surgeons mandated the use of the checklist elements of the protocols as part of its Cancer Program Standards for Approved Cancer Programs. Therefore, it becomes even more important for pathologists to familiarize themselves with the document. At the same time, the College cautions that use of the protocols other than for their intended educational purpose may involve additional considerations that are beyond the scope of this document.

## **Summary of Changes to Checklist(s)**

*Protocol revision date: January 2005*

No changes have been made to the data elements of the checklist(s) since the January 2004 protocol revision.

## Surgical Pathology Cancer Case Summary (Checklist)

*Protocol revision date: January 2005  
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### \*KIDNEY: Biopsy

(Note: Use of checklist for biopsy specimens is optional)

\*Patient name:

\*Surgical pathology number:

<b>Note: Check 1 response unless otherwise indicated.</b>
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### \*MACROSCOPIC

#### \*Specimen Type

\*  Incisional biopsy, needle

\*  Incisional biopsy, wedge

\*  Other (specify): \_\_\_\_\_

\*  Not specified

#### \*Laterality

\*  Right

\*  Left

\*  Not specified

### \*MICROSCOPIC

#### \*Histologic Type

\*  Cannot be determined

\*  Conventional (clear cell) renal carcinoma

\*  Papillary renal carcinoma

\*  Chromophobe renal carcinoma

\*  Collecting duct carcinoma

\*  Sarcomatoid carcinoma arising in renal cell carcinoma  
(specify subtype): \_\_\_\_\_

\*  Renal cell carcinoma, unclassified

\*  Other (specify): \_\_\_\_\_

\*  Carcinoma, type cannot be determined

**\*Histologic Grade (Fuhrman Nuclear Grade)**

- \*  Not applicable
- \*  GX: Cannot be assessed
- \*  G1: Nuclei round, uniform, approximately 10  $\mu$ ; nucleoli inconspicuous or absent
- \*  G2: Nuclei slightly irregular, approximately 15  $\mu$ ; nucleoli evident
- \*  G3: Nuclei very irregular, approximately 20  $\mu$ ; nucleoli large and prominent
- \*  G4: Nuclei bizarre and multilobated, 20  $\mu$  or greater, nucleoli prominent, chromatin clumped

**\*Additional Pathologic Findings (check all that apply)**

- \*  None identified
- \*  Inflammation (type): \_\_\_\_\_
- \*  Glomerular disease (type): \_\_\_\_\_
- \*  Interstitial disease (type): \_\_\_\_\_
- \*  Other (specify): \_\_\_\_\_

**\*Comment(s)**

\* Data elements **with asterisks** are **not required** for accreditation purposes for the Commission on Cancer. These elements may be clinically important, but are not yet validated or regularly used in patient management. Alternatively, the necessary data may not be available to the pathologist at the time of pathologic assessment of this specimen.

**Surgical Pathology Cancer Case Summary (Checklist)**

*Protocol revision date: January 2005  
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**KIDNEY: Nephrectomy, Partial or Radical**

Patient name:

Surgical pathology number:

**Note: Check 1 response unless otherwise indicated.**

**MACROSCOPIC****Specimen Type**

- Partial nephrectomy  
 Radical nephrectomy  
 Other (specify): \_\_\_\_\_  
 Not specified

**Laterality**

- Right  
 Left  
 Not specified

**\*Tumor Site (check all that apply)**

- \*  Upper pole  
 \*  Middle  
 \*  Lower pole  
 \*  Other (specify): \_\_\_\_\_  
 \*  Not specified

**Focality**

- Unifocal  
 Multifocal

**Tumor Size (largest tumor if multiple)**

Greatest dimension: \_\_\_ cm

\*Additional dimensions: \_\_\_ x \_\_\_ cm

 Cannot be determined (see Comment)

**Macroscopic Extent of Tumor (check all that apply)**

- Tumor limited to kidney
- Tumor extension into perinephric tissues
- Tumor extension beyond Gerota's fascia
- Tumor extension into adrenal
- Tumor extension into major veins

**MICROSCOPIC****Histologic Type**

- Clear cell (conventional) renal carcinoma
- Papillary renal cell carcinoma
- Chromophobe renal cell carcinoma
- Collecting duct carcinoma
- Sarcomatoid carcinoma arising in renal cell carcinoma  
Specify: subtype \_\_\_\_\_ ; \_\_\_\_% of sarcomatoid element
- Renal cell carcinoma, unclassified
- Other (specify): \_\_\_\_\_
- Carcinoma, type cannot be determined

**Histologic Grade (Fuhrman Nuclear Grade)**

- Not applicable
- GX: Cannot be assessed
- G1: Nuclei round, uniform, approximately 10  $\mu$ ; nucleoli inconspicuous or absent
- G2: Nuclei slightly irregular, approximately 15  $\mu$ ; nucleoli evident
- G3: Nuclei very irregular, approximately 20  $\mu$ ; nucleoli large and prominent
- G4: Nuclei bizarre and multilobated, 20  $\mu$  or greater, nucleoli prominent, chromatin clumped
- Other (specify): \_\_\_\_\_

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**Pathologic Staging (pTNM)**Primary Tumor (pT) pTX: Primary tumor cannot be assessed pT0: No evidence of primary tumor pT1: Tumor 7 cm or less in greatest dimension, limited to the kidney pT1a: Tumor 4 cm or less in greatest dimension, limited to the kidney pT1b: Tumor more than 4 cm but not more than 7 cm in greatest dimension, limited to the kidney pT2: Tumor more than 7 cm in greatest dimension, limited to the kidney pT3: Tumor extends into major veins or invades adrenal gland or perinephric tissues but not beyond Gerota's fascia pT3a: Tumor directly invades adrenal gland or perirenal and/or renal sinus fat but not beyond Gerota's fascia pT3b: Tumor grossly extends into the renal vein or its segmental (muscle-containing) branches, or vena cava below the diaphragm pT3c: Tumor grossly extends into vena cava above diaphragm or invades the wall of the vena cava pT4: Tumor invades beyond Gerota's fasciaRegional Lymph Nodes (pN) pNX: Cannot be assessed pN0: No regional lymph node metastasis pN1: Metastasis in a single regional lymph node pN2: Metastasis in more than 1 regional lymph nodeSpecify: Number examined: Number involved: Distant Metastasis (pM) pMX: Cannot be assessed pM1: Distant metastasis

\*Specify site(s), if known: \_\_\_\_\_

**Margins (check all that apply)** Cannot be assessed Margins uninvolved by invasive carcinoma Margin(s) involved by invasive carcinoma Renal capsular margin (partial nephrectomy only) Perinephric fat margin (partial nephrectomy only) Renal vein margin Gerota's fascial margin Ureteral margin Renal parenchymal margin (partial nephrectomy only) Other (specify): \_\_\_\_\_

**Adrenal Gland**

- Not present  
 Uninvolved by tumor  
 Direct invasion (T3a)  
 Metastasis (M1)

**\*Venous (Large Vessel) Invasion (V)**

(excluding renal vein and inferior vena cava)

- \*  Absent  
 \*  Present  
 \*  Indeterminate

**\*Lymphatic (Small Vessel) Invasion (L)**

- \*  Absent  
 \*  Present  
 \*  Indeterminate

**\*Additional Pathologic Findings (check all that apply)**

- \*  None identified  
 \*  Inflammation (type): \_\_\_\_\_  
 \*  Glomerular disease (type): \_\_\_\_\_  
 \*  Interstitial disease (type): \_\_\_\_\_  
 \*  Other (specify): \_\_\_\_\_

**\*Comment(s)**

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