



Collecting Cancer Data: Kidney



2015-2016 NAACCR Webinar Series

May 5, 2016

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○○○○○ Q&A

- Please submit all questions concerning webinar content through the Q&A panel.
- Reminder:
- If you have participants watching this webinar at your site, please collect their names and emails.
 - We will be distributing a Q&A document in about one week. This document will fully answer questions asked during the webinar and will contain any corrections that we may discover after the webinar.

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○○○○○ Fabulous Prizes



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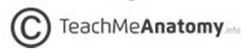
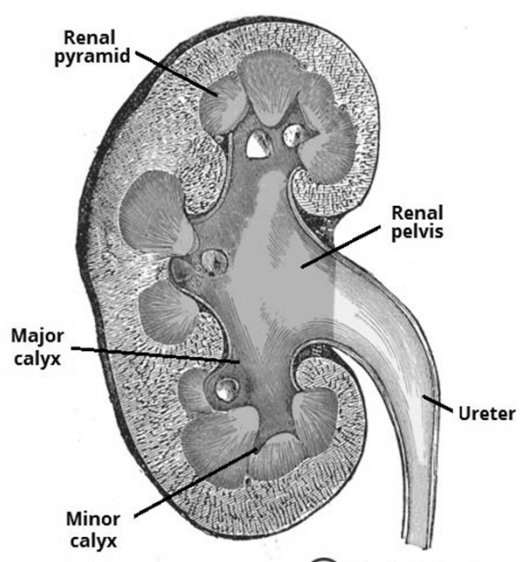
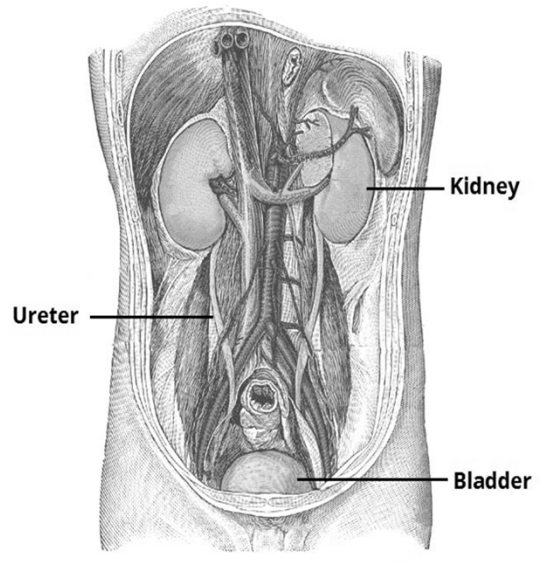
○○○○○ Agenda

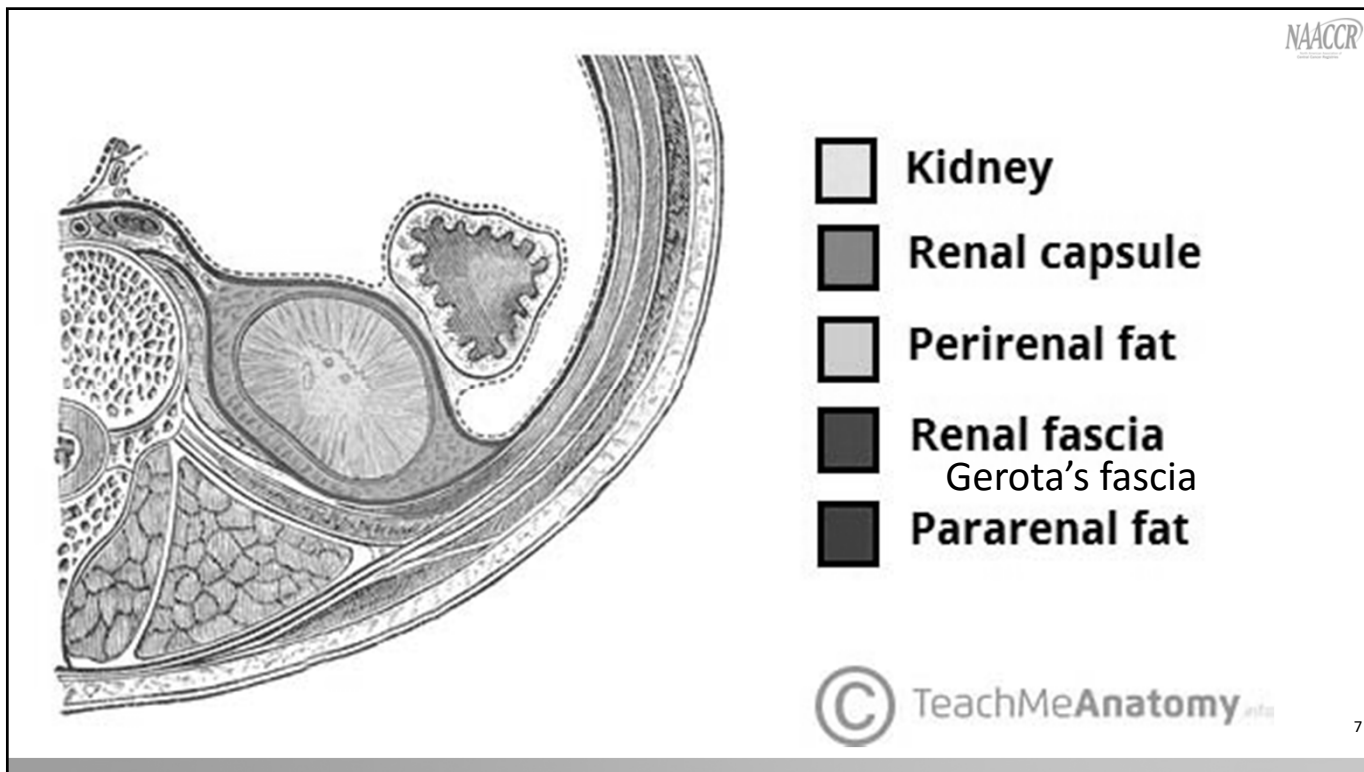
- Anatomy
- Multiple Primary and Histology Rules
- Epi Moment
- Staging
- Treatment

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Anatomy





Regional Lymph Nodes

- Renal Hilar
- Caval
 - paracaval, precaval and retrocaval
- Interaortacaval
- Aortic
 - paraortic, preaortic and retroaortic

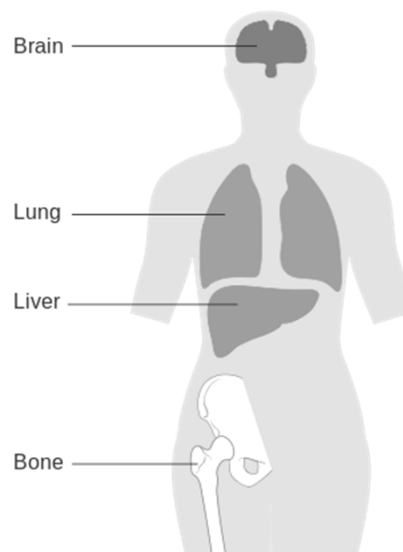
NAACCR

1. Paracaval
2. Precaval
3. Interaortacaval
4. Preaortic
5. Paraortic
6. Right suprarenal
7. Left suprarenal
8. Right iliac
9. Left iliac
10. Interiliac
11. Right gonadal vein
12. Left gonadal vein

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Common Metastatic Sites

- Brain
- Lung
- Liver
- Bone
- Distant Lymph Nodes



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Multiple Primary and Histology Rules

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Table 1 - Renal cell carcinoma and specific renal cell types

Table Instructions: Use this table to identify specific renal cell carcinoma types.

Note: Renal cell carcinoma, NOS (8312) is the non-specific term under which the specific renal cell carcinoma types are listed. This table is a complete listing of specific renal cell carcinoma types.

Column 1: Code	Column 2: Specific Renal Cell Carcinoma Types
8260	Papillary (Chromophil) *
8310	Clear Cell
8316	Cyst associated, cystic
8317	Chromophobe *
8318	Sarcomatoid (Spindle cell)
8319	Collecting duct type (Bellini duct)
8320	Granular cell
8510	Medullary carcinoma, NOS; medullary adenocarcinoma
8959	Malignant cystic nephroma; malignant multilocular cystic nephroma
* <i>Note:</i> Chromophil and chromophobe are different histologies	



○○○○ Multiple Primary Rules



- Rule M3
 - Wilms Tumors are a single primary
- Rule M5
 - Tumors in both right and left kidney are multiple primaries
- Rule M6
 - Tumors diagnosed more than 3 years apart are multiple primaries
- Rule M8
 - One tumor with a specific renal cell type and another tumor with a different specific renal cell type are multiple primaries (Table 1)



○○○○○ Histology Coding Rules – Single Tumor

- Rule H6
 - Code 8255 (adenocarcinoma with mixed subtypes) where there are two or more specific renal cell carcinoma types (Table 1)
- *Example*
 - Renal Cell carcinoma, papillary and clear cell types

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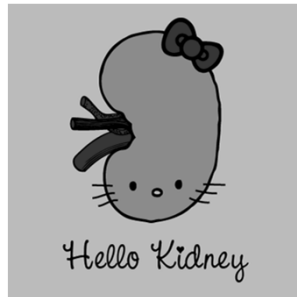


○○○○○ Histology Coding Rules – Multiple Tumors Abstracted As A Single Primary

- Rule H11
 - Code the histology of the most invasive tumor
 - Only when the first three digits of histology codes are identical

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Questions?
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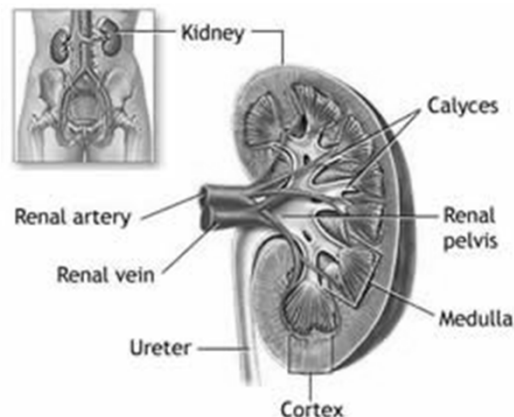
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And now a brief pause for...
An Epi Moment

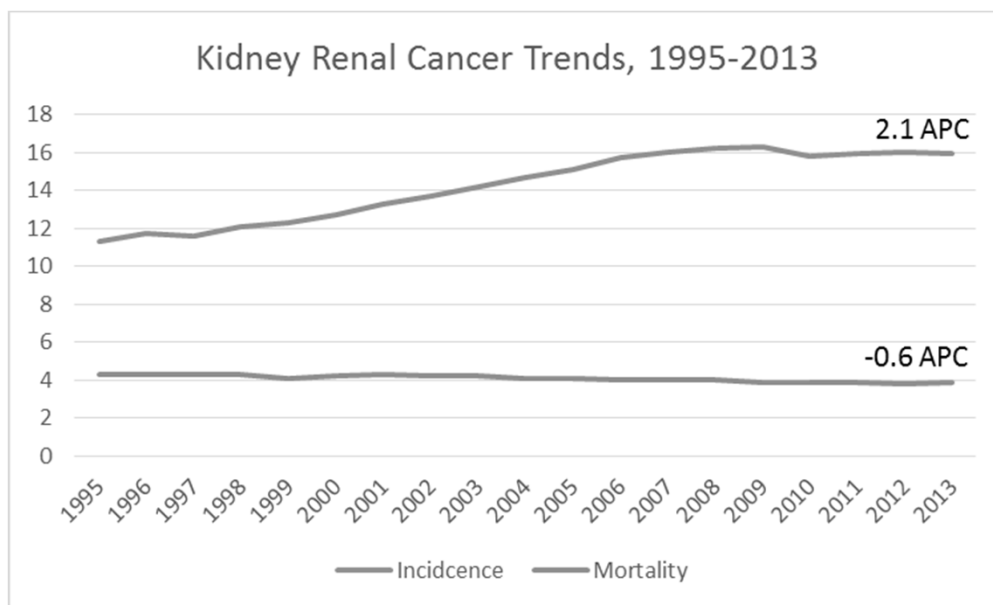
(insert "He Needs a Kidney" from 30 Rock here)

○○○○○ Epidemiology of Kidney Renal Cancer

- Incidence (2003-2012)
 - 21.5 per 100,000 men; rank 7th
 - whites 21.6; 23.6 blacks; 10.8 API; 29.7 AIAN
 - 20.6 Hispanic; 21.7 non-Hispanic
 - 11.3 per 100,000 women; rank 9th
 - whites 11.4; 12.7 blacks; 4.9 API; 18.3 AIAN
 - 11.8 Hispanic; 11.3 non-Hispanic
- Mortality (2003-2012)
 - 5.7 per 100,000 men; rank 10th
 - whites 5.9; 5.6 blacks; 2.9 API; 8.7 AIAN
 - 5.0 Hispanic; 5.8 non-Hispanic
 - 2.5 per 100,000 women; rank 12th
 - whites 2.6; 2.5 blacks; 1.2API; 4.7 AIAN
 - 2.4 Hispanic; 2.5 non-Hispanic



Kidney Renal Cancer Trends, 1995-2013

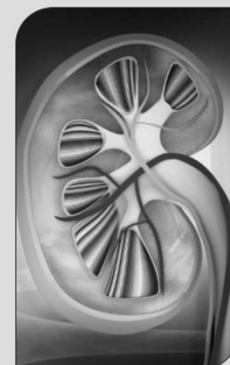


○○○○○ Epidemiology of Kidney Renal Cancer

- Kidneys filter waste & water
 - Blood to urine; Produce hormones
 - Only 1 required
 - Predominately renal cell
 - 90% are RCC
 - Usually single tumor
 - Wilms most common in children
 - Transitional cell
 - Average age 64 at dx
-
- No population based screening
 - Often grow quite large before symptoms
 - Not palpable during physical exam
 - Urinalysis (detect blood)
 - Imaging (CT scans, MRI, ultrasound—cannot distinguish between benign and malignant)

KIDNEY CANCER SYMPTOMS,

- Blood in your urine (hematuria) — the most common sign
- Mass or lump in your abdominal area
- Pain in your side, flank or lower back
- Swelling in your legs and ankles
- Late symptoms include anemia (low blood count), persistent fatigue and rapid weight loss



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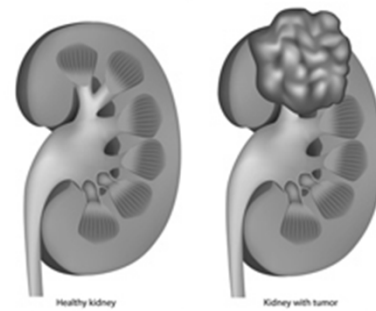
KCUC
KANSAS CITY UROLOGY CARE, P.A.

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○○○○○ Risk Factors for Kidney Renal Cancer

- Men, blacks
- Smoking
 - Dose response
- Long term pain medication use
 - 3x
- Obesity
 - Possibly hormonal
- High blood pressure
- Occupational Exposures
 - Cadmium, herbicides, organic solvents (trichloroethylene)
- Genetic Factors and conditions
 - Von Hippel-Lindau disease
 - Hereditary papillary renal cell & leiomyoma-renal cell carcinoma
 - Birt-Hogg-Dube (BHD) syndromes; Familial renal cancer
- Alcohol appears protective

Kidney Cancer

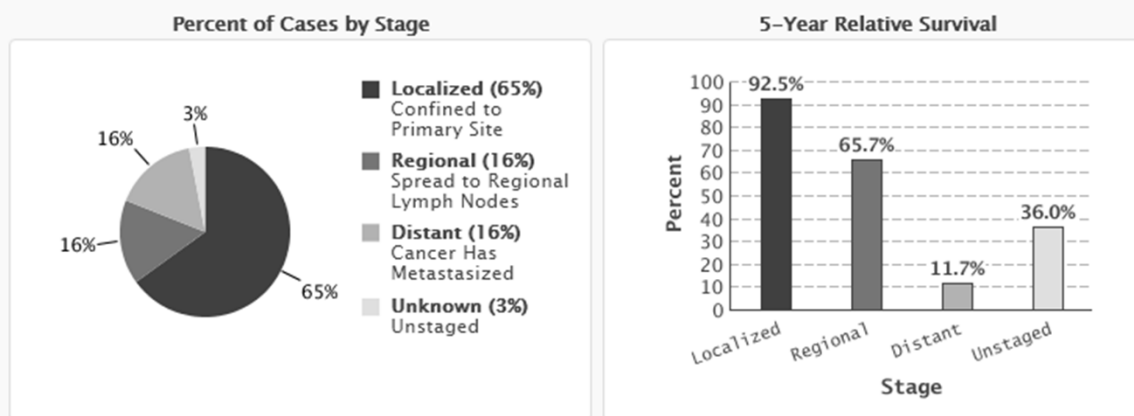


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Kidney Renal Cancer Prognosis

Percent of Cases & 5-Year Relative Survival by Stage at Diagnosis: Kidney and Renal Pelvis Cancer



SEER 18 2006-2012, All Races, Both Sexes by SEER Summary Stage 2000



CINA

- Annual Report to the Nation

Press releases address the rise in kidney renal cancer

- Cancer cluster concerns (occupational)
 - TCE well contamination View Master site (Oregon)
 - Camp Lejeune (VPR) TCE and other contaminants drinking /bathing



Quiz 1



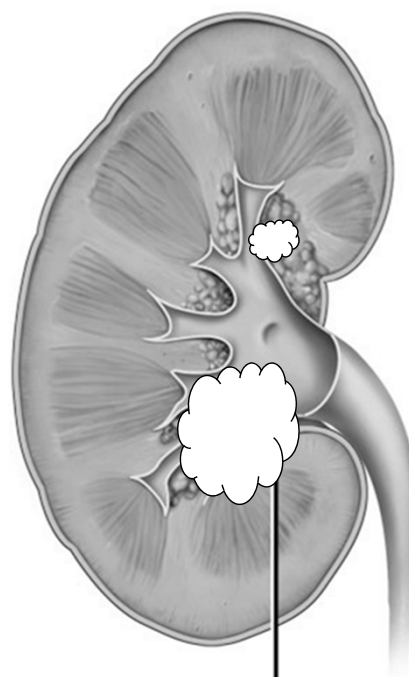
Questions?



Summary Stage

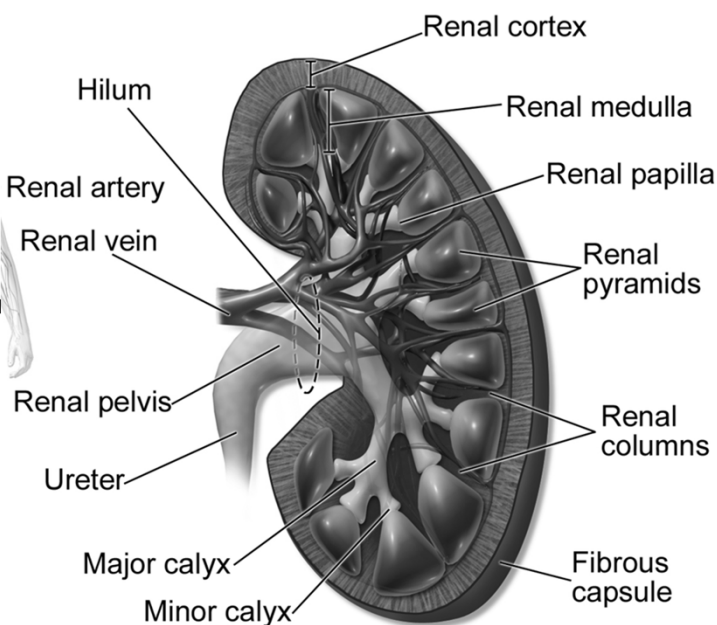
Localized

- Invasive cancer confined to kidney cortex and/or medulla
- Invasion of renal capsule
- Renal pelvis or calyces involved
- Separate focus of tumor in renal pelvis/calyx



Regional by Direct Exten

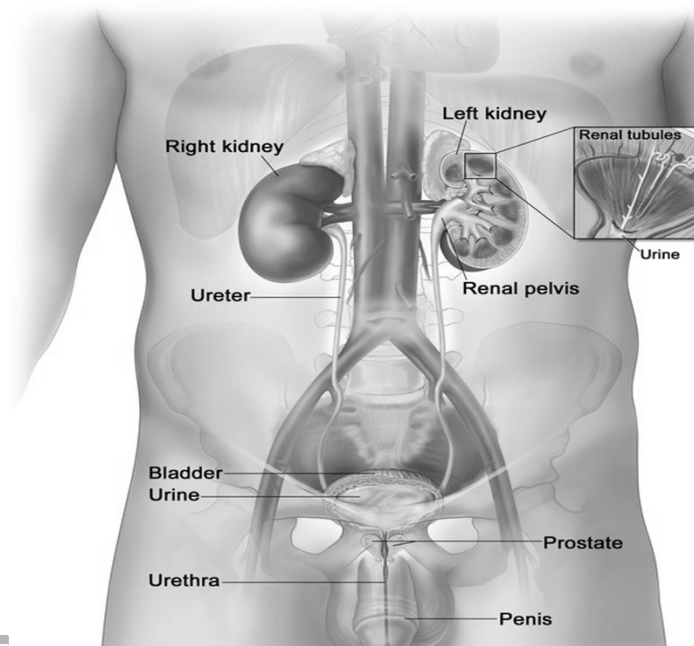
- Extension to:
 - Adrenal (suprarenal) gland, ipsila
 - Ascending colon **from right kidn**
 - Blood vessel(s) (major)
 - Descending colon **from left kidn**
 - Diaphragm
 - Duodenum **from right kidney**
 - Perirenal (perinephric) tissue/fat
 - Peritoneum
 - Psoas muscle***
 - Renal (Gerota's) fascia
 - Retroperitoneal soft tissue
 - Tail of pancreas
 - Ureter, including implant(s), ipsila



Kidney Anatomy

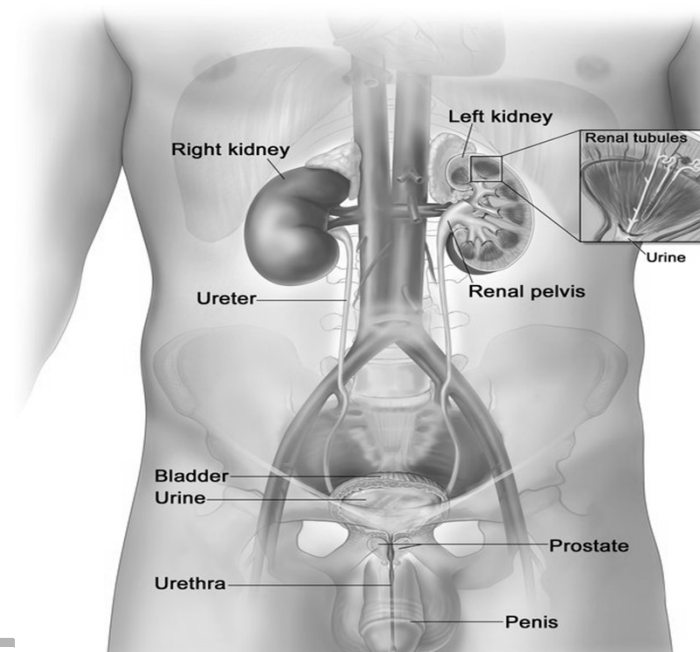
Regional Lymph Nodes

- REGIONAL Lymph Nodes (including contralateral and bilateral)
 - Aortic, NOS
 - Lateral (lumbar)
 - Para-aortic
 - Periaortic
 - Paracaval
 - Renal hilar
 - Retroperitoneal, NOS



○○○○○ Distant Lymph Nodes

- Distant lymph node(s)
- Further contiguous extension:
 - Aorta
 - Contralateral:
 - Adrenal (suprarenal) gland
 - Kidney
 - Ureter
 - Liver
 - Ribs
 - Spleen
 - Stomach
 - Other direct extension

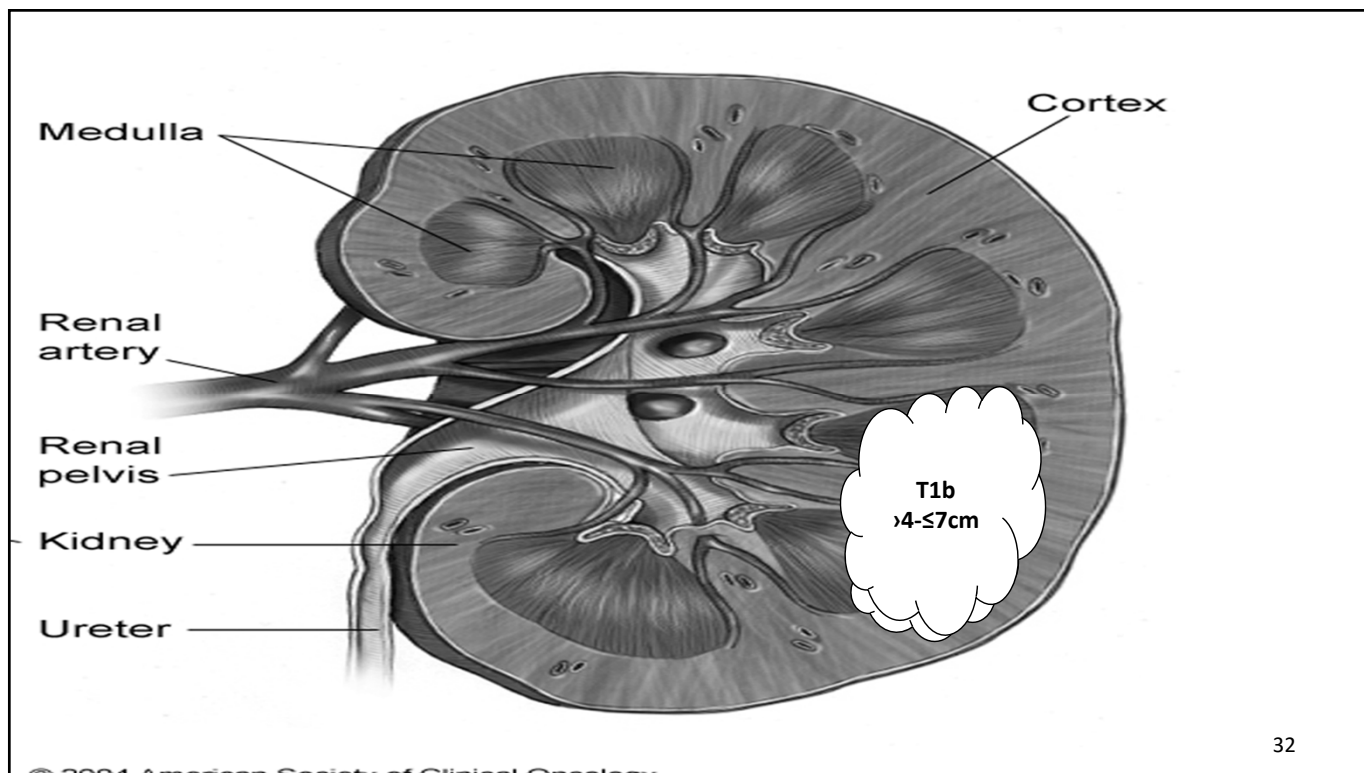
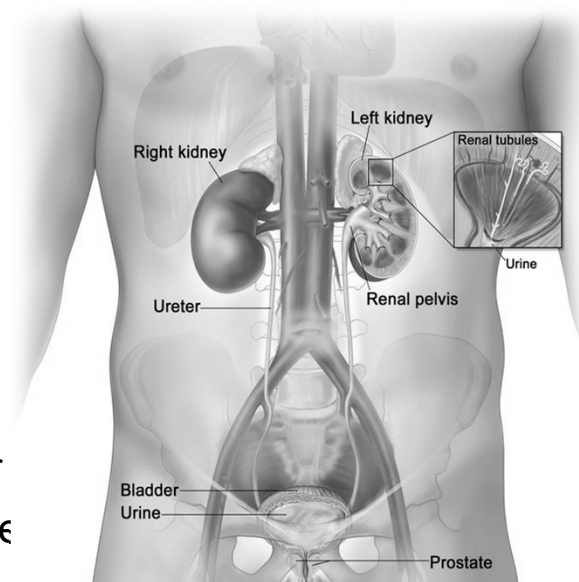


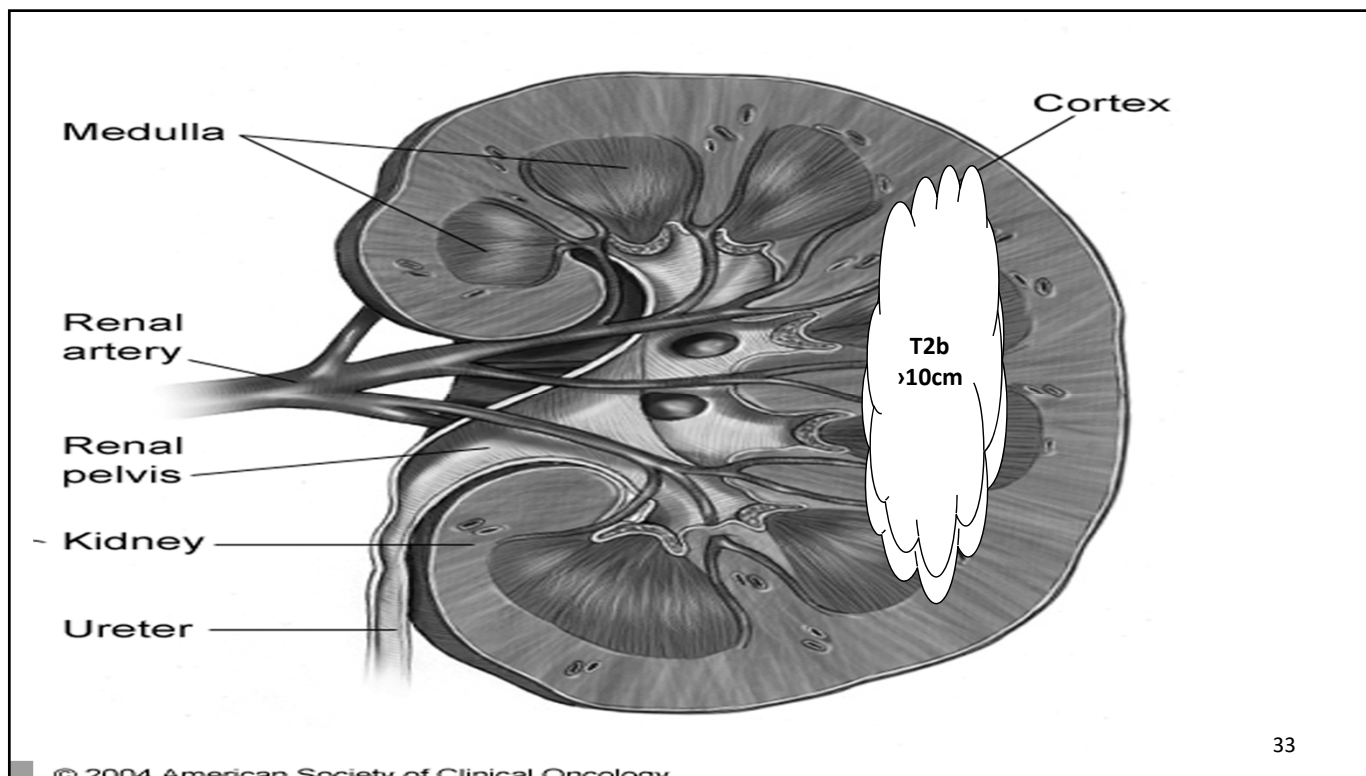
AJCC Staging

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Rules for Classification

- Clinical Staging
 - Imaging
 - CT
 - MRI
 - Biopsy
- Pathologic Staging
 - Resection of the primary tumor
 - Excision of regional lymph node





○○○○○ Stage Scenario 1

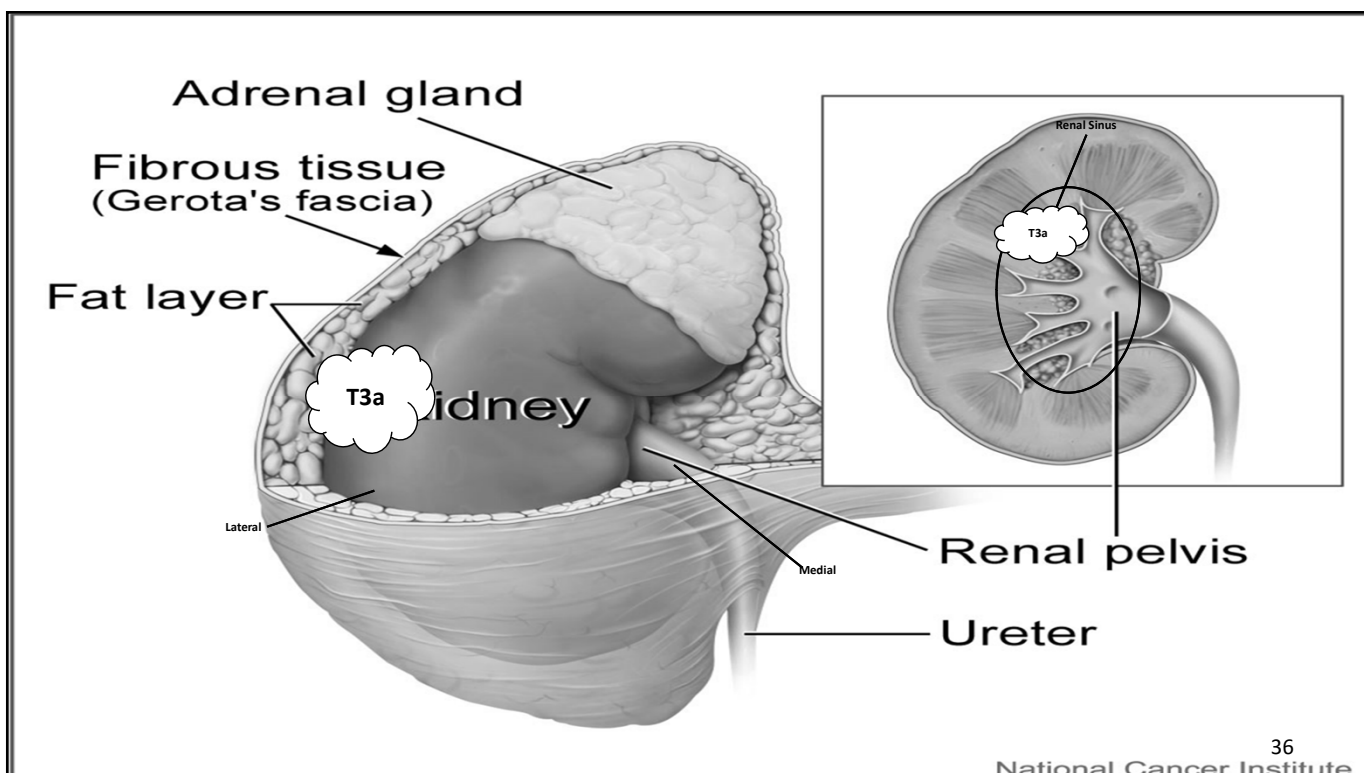


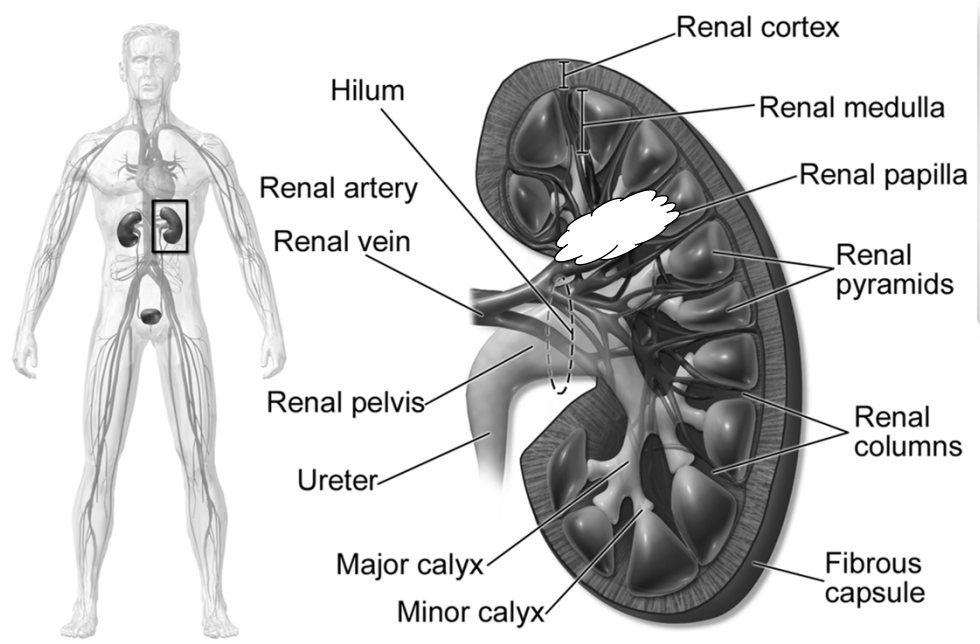
- A patient presents with bloodless hematuria. A CT is done and a tumor is identified in the left kidney. The tumor measures 4cm and is confined to the parenchyma of the kidney. The tumor is highly suggestive of primary kidney malignancy. The patient was referred to a surgeon at your facility and a partial nephrectomy was performed.
- The pre-operative statement on the operative report indicated the patient was having a partial nephrectomy due to a Stage I kidney cancer.
- Pathology confirmed the tumor 4cm and was confined to the kidney with no invasion of the renal capsule. No lymph nodes were removed.

○○○○○ Stage Scenario 1

- What is the stage?

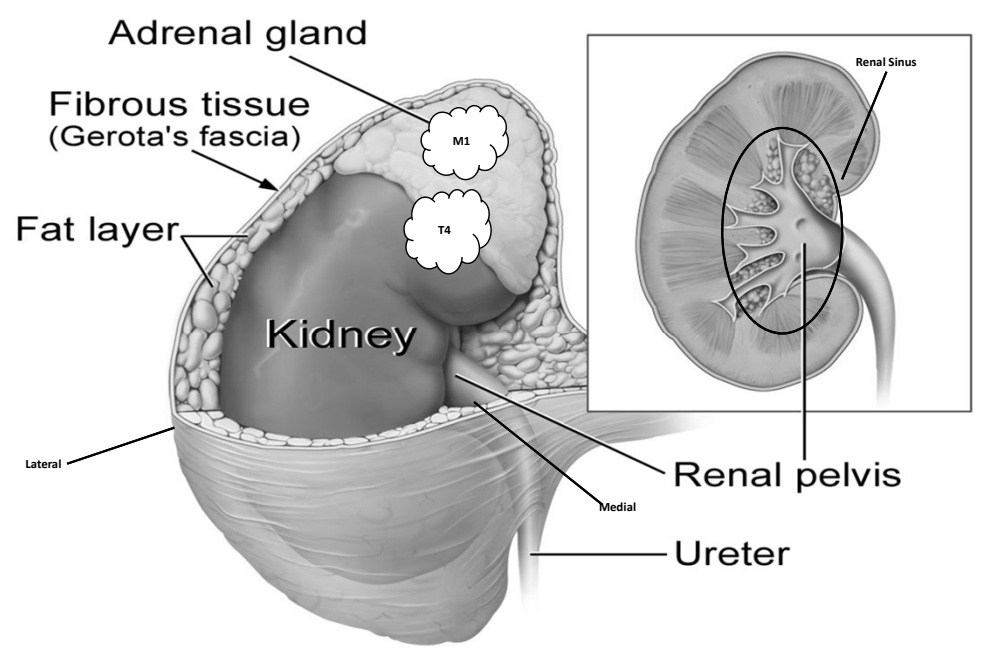
Data Items as Coded in Current NAACCR Layout				
	T	N	M	Stage Group
Clin	c1a	c0	c0	I
Path	p1a	pX	c0	99
Summary Stage	Localized			





Kidney Anatomy

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○○○○○ Stage Scenario 2

- A 63 year old white male presents with a history of right flank pain for the last month. An abdominal CT showed a large complex right renal mass (10 x 8 x 7.8 cm) highly suspect for renal cell carcinoma. The tumor extends into the renal vein, but does not extend beyond the Gerota’s fascia. Biopsy confirmed renal cell carcinoma. Additional workup was negative. Patient went on to have a radical nephrectomy
- Pathology from radical nephrectomy:
 - Specimen: Kidney and adrenal gland, left, radical nephrectomy.
 - Histologic Tumor Type: Sarcomatoid renal cell carcinoma
 - Histologic Tumor Grade: Fuhrman grade 4 (of 4)
 - Tumor Size: 10.0 X 8.3 X 8.0 CM.
 - Tumor Extension: Tumor extends along the renal vein into the inferior vena cava. Tumor does not extend beyond the Gerota’s fascia.
 - Margins: All margins negative



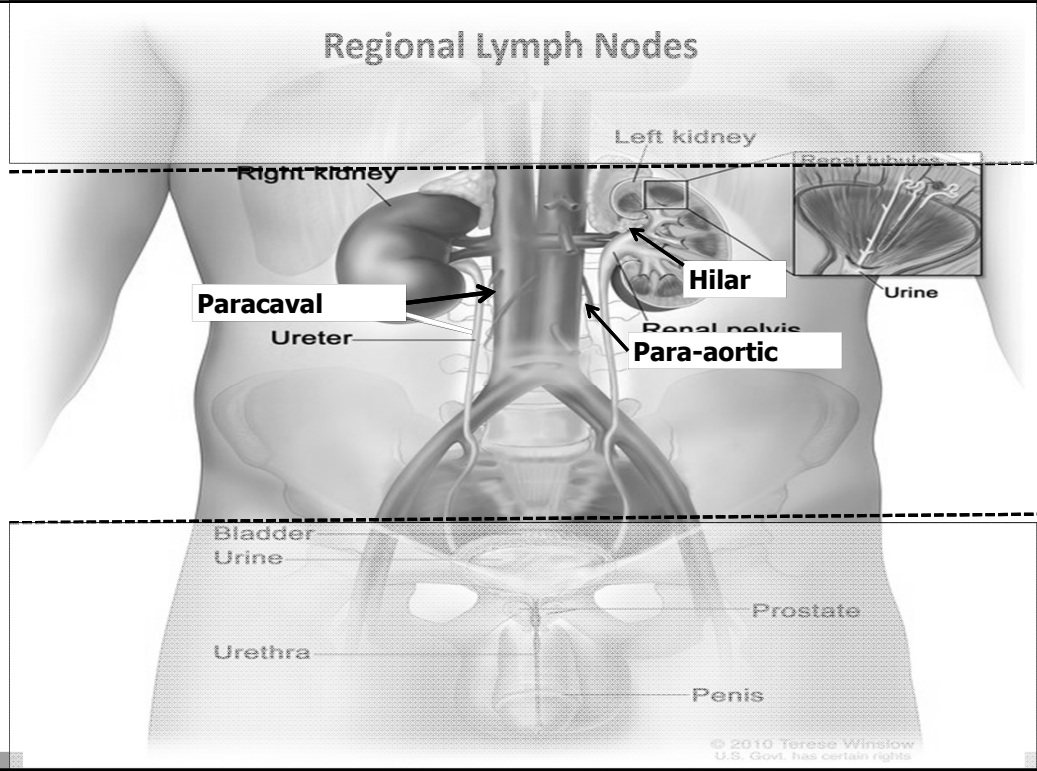
○○○○○ Stage Scenario 2

- What is the stage?

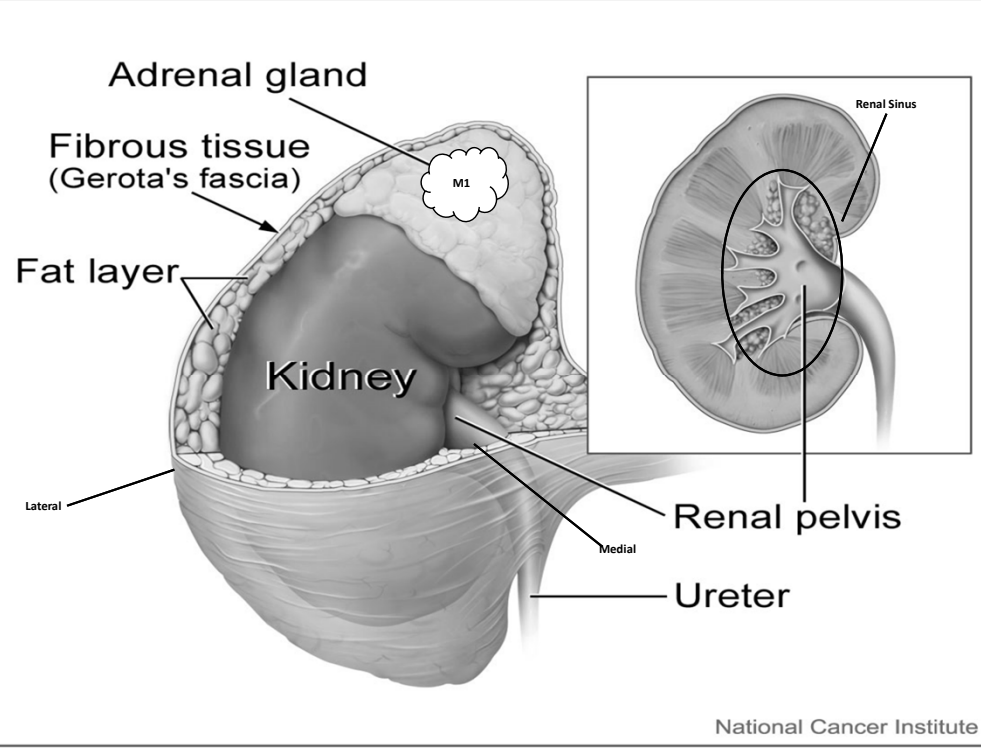
	Data Items as Coded in Current NAACCR Layout			
	T	N	M	Stage Group
Clin	c3a	c0	c0	III
Path	p3	pX	c0	III
Summary Stage	Regional		by direct Extension	



Regional Lymph Nodes



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○○○○○ Stage Scenario 3

- A 93 year old patient was found to have multiple lung lesions. A biopsy was done that confirmed metastatic renal cell carcinoma. An abdominal CT showed a 7.5 tumor in the left kidney extending directly into the adrenal gland and into the perirenal fat. Also noted were 3 enlarge paracaval lymph nodes highly suspicious for metastasis.
- The patient refused any further work-up or treatment.



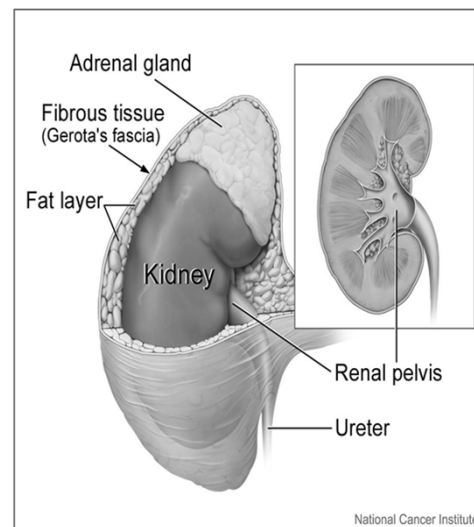
○○○○○ Stage Scenario 3

- What is the stage?

	Data Items as Coded in Current NAACCR Layout			
	T	N	M	Stage Group
Clin	c4	c1	p1	IV
Path			p1	IV
Summary Stage			7 Distant	

SSF1: Invasion Beyond Capsule

- Record specific location of invasion beyond renal capsule
 - Code 000: Invasion beyond capsule not present or not identified
 - Code 010: Lateral invasion
 - Into perinephric fat
 - Code 020: Medial invasion
 - Into renal sinus, perisinus fat
 - Code 030: Medial and lateral invasion
 - Code 991: Unspecified invasion beyond capsule
 - Code 998: No surgical resection of primary site



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Pop Quiz

A patient had a left nephrectomy and pathology showed renal cell carcinoma, papillary type, measuring 7.5cm, Fuhrman grade III. The tumor extended through the renal sinus into, but not beyond, the renal vein.

- What is the code for SSF1?
 - 000: Invasion beyond capsule not present/not identified
 - 010: Lateral invasion: Perinephric fat
 - • 020: Medial invasion: Renal sinus; Perisinus fat
 - 030: 010 + 020
 - 991: Invasion beyond capsule, NOS

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SSSF2: Vein Involvement

- Record involvement of specific named veins
 - Code 000: Vein involvement not present or not identified
 - Code 010: Involvement of renal vein only
 - Codes 020-040: Involvement of inferior vena cava (IVC) only
 - Codes 050-090: Involvement of renal vein + IVC
 - Code 998: No surgical resection of primary site
- Do NOT record involvement of small unnamed veins (lymph vascular invasion)

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Pop Quiz

A patient had a left nephrectomy. The pathology showed renal cell carcinoma, clear cell type, measuring 8.5cm, Fuhrman grade III. The tumor involved the renal pelvis. Lymphovascular invasion was present.

- What is the code for SSSF2?
 - • 000: Vein involvement not present/not identified
 - 010: Involvement of renal vein only
 - 040: Involvement of IVC, NOS only
 - 999: Unknown

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SSSF3: Ipsilateral Adrenal Gland Involvement

- Record type of involvement of ipsilateral adrenal gland
 - Code 000: Ipsilateral adrenal gland involvement not present or not identified
 - Code 010: Contiguous ipsilateral adrenal gland involvement
 - Code 020: Noncontiguous ipsilateral adrenal gland involvement
 - Code 030: Contiguous + noncontiguous ipsilateral adrenal gland involvement
 - Code 040: Unspecified ipsilateral adrenal gland involvement
 - Code 998: No histologic examination to determine ipsilateral adrenal gland involvement

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SSSF4: Sarcomatoid Features

- Record presence or absence of sarcomatoid features
 - Code 000: Sarcomatoid features not present or not identified
 - Code 010: Sarcomatoid features present or identified
 - Code 987: Not applicable - Not a renal cell carcinoma morphology
 - Code 998: No pathologic examination of primary site

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○○○○○ Pop Quiz



An abdominal CT scan shows a small tumor confined to right kidney. A core biopsy of the right renal mass shows renal cell carcinoma, Fuhrman grade II. The patient was treated with a cryoablation of right kidney mass.

1. What is the code for SSF3?

A. 000: Ipsilateral adrenal gland involvement not present/not identified

→ B. 998: No histologic examination to determine ipsilateral adrenal gland involvement

2. What is the code for SSF4?

A. 000: Sarcomatoid features not present/not identified

→ B. 998: No pathologic examination of primary site

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○○○○○ Pop Quiz



• What is the code for SSF3?

A. 000: Ipsilateral adrenal gland involvement not present/not identified

→ B. 998: No histologic examination to determine ipsilateral adrenal gland involvement

• What is the code for SSF4?

→ A. 000: Sarcomatoid features not present/not identified

B. 998: No pathologic examination of primary site

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SSSF6: Fuhrman Nuclear Grade

- Record the Fuhrman nuclear grade
 - Based on nuclear size and shape and the prominence of nucleoli in the tumor cells
 - Codes 010-040
 - Fuhrman nuclear grade 1-4
 - Code 987: Not applicable - Not a renal cell carcinoma morphology
 - Code 998: No histologic examination of primary site

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Pop Quiz

- Right nephrectomy path: 2 cm renal lesion with invasion of the renal capsule, sarcoma, grade 2 of 3.
- What is the code for SSSF6?
 - A. 010: Grade 1
 - B. 020: Grade 2
 - C. 030: Grade 3
 - ➔ D. 987: Not applicable: Not a renal cell carcinoma morphology
 - E. 999: Unknown

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○○○○○ SSF8: Extranodal Extension (ENE) of Regional Lymph Nodes

- Code 010
 - No ENE documented in reports
 - Documented on reports that nodes are involved but no mention of ENE
 - Involved nodes are clinically mobile
- Code 020
 - ENE is present per path report or clinical statement
 - Involved nodes are clinically fixed or matted
- Code 030
 - Documentation of involved nodes but no mention of ENE and no reports to review

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○○○○○ Pop Quiz

- Abdominal CT scan: 10 cm tumor of left kidney with malignant retroperitoneal lymphadenopathy, less than 2 cm.
- Biopsy of renal mass: Renal cell carcinoma.
- Patient died before treatment could be started.

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○○○○○ Pop Quiz



- What is the code for SSF8?
 - A. 000: No regional nodes involved
 - B. 010: Extranodal extension not present
 - C. 030: Regional nodes involved, unknown if extranodal extension
 - D. 999: Unknown

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○○○○○ Standard Setters SSF Requirements for Kidney (parenchyma)



- SEER and CoC,
 - SSF 1, 2, 3, 4, 6, 8
- NPCR and Canadian Council of Cancer Registries
 - None

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Treatment

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○○○○○ Lymph Node Dissection (LND)

- Is not thought to provide therapeutic benefit
 - No significant difference in overall survival among patients who had LND and those that only had radical nephrectomy
- Does provide prognostic information
 - Virtually all patients with positive lymph nodes experience subsequent relapse

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○○○○○ **Surgery**

Code	Description
30	Partial/Subtotal Nephrectomy or partial ureterectomy
40	Complete/total/simple nephrectomy Nephroureterectomy
50	Radical nephrectomy
70	Any nephrectomy (simple, subtotal, complete, partial, simple, total, radical) in continuity with resection of other organs

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○○○○○ **Approach-Surgical Procedure of the Primary Site at this Facility**

Description

- This item is used to describe the surgical method used to approach the primary site for patients undergoing surgery of the primary site at this facility.
- If the patient has multiple surgeries to the primary site, this item describes the approach used for the most invasive, definitive surgery.

Rationale

- This item is used to monitor patterns and trends in the adoption and utilization of minimally-invasive surgical techniques.

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○○○○○ Approach-Surgical Procedure of the Primary Site at this Facility

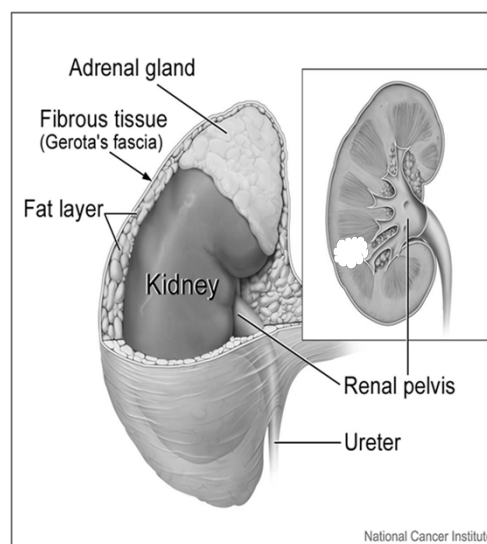
Code	Description
0	No surgical procedure of primary site at this facility. Diagnosed at autopsy
1	Robotic assisted
2	Robotic converted to open
3	Laparoscopic
4	Laparoscopic converted to open
5	Open. Approach not specified
9	Patient record does not state whether a surgical procedure of the primary site was performed and no information is available. Death Certificate Only

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○○○○○ Stage I

- **Partial Nephrectomy**
 - Small unilateral tumors
 - Preservation of renal function is an issue
- **Radical Nephrectomy**
 - If partial nephrectomy not feasible
- **Active Surveillance**
- **Thermal Ablation**

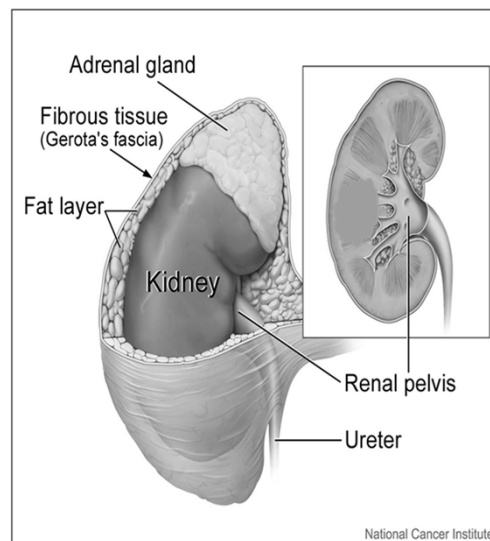


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Stage II - III

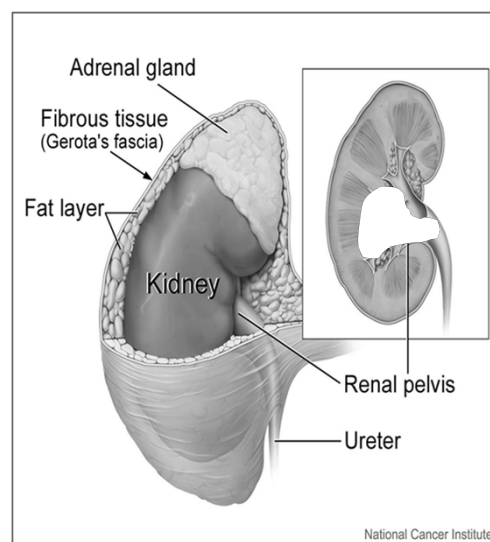
- Radial nephrectomy
 - Tumor into inferior vena cava
- Partial nephrectomy
 - Small unilateral T2a tumors



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Stage IV

- Nephrectomy
 - Surgical metastasectomy
 - Lung, bone, brain
- Cytoreductive nephrectomy
- Systemic therapy



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Questions?



Quiz 2





Case Scenarios



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○○○○○ Coming Up...

- Collecting Cancer Data: Prostate
 - 6/2/2016
- Patient Outcomes
 - 7/7/2016

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○○○○○ And The Winners Are...



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○○○○○ CE Certificate Quiz/Survey

- Phrase
 - Fuhrman
- Link
 - <http://www.surveygizmo.com/s3/2751426/Kidney-2016>

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Thank You!!!!



Jim Hofferkamp jhofferkamp@naaccr.org

Angela Martin amartin@naaccr.org

Recinda Sherman rsherman@naaccr.org