## Quiz 1

1. Renal cell carcinoma originates in the
	1. Renal pelvis
	2. **Renal tubules**
	3. Adrenal Gland
	4. Gerota’s fascia
2. The kidneys are covered by a layer of adipose tissue. This layer of fat is covered by a sheath of fibrous tissue referred to as…
	1. Renal fat
	2. Renal capsule
	3. **Gerota’s fascia**
	4. Renal sinus
3. The hilum of the kidney is where which of the following enter and/or exit the kidney (circle all that apply).
	1. **Renal vein**
	2. **Renal artery**
	3. **Renal pelvis**
	4. Vena cava
4. The most common subtype of renal cell carcinoma is
	1. Papillary
	2. Chromophobe
	3. Medullary
	4. **Clear cell**
5. Which of the following is not a regional lymph node for kidney?
	1. Hilar
	2. Para-aortic
	3. Para-caval
	4. **Mediastinal**
6. Radical nephrectomy is the first course treatment for patients with stage II renal cell carcinoma of the kidney. Adjuvant treatment for these patients primarily consists of…
	1. **Active Surveillance**
	2. Chemotherapy
	3. Hormone Therapy
	4. Radiation Therapy

A 36 year old white male presented with right flank pain and a history of kidney stones. A CT of the abdomen and pelvis done on 2/10/13 showed a 3 cm cyst in the upper pole of the right kidney and a 3.2 cm mass in the right medial-portion of the kidney which has both cystic and solid components. The patient was treated with a robotic assisted laparoscopic partial nephrectomy. Two lesions were identified on the right side. The patient had a right partial nephrectomy followed by completion right open radical nephrectomy.

**Pathology Report**

Final Diagnosis:

* Tumor #1: Renal cell carcinoma, cystic clear cell type Fuhrman grade 3-4 with extensive sarcomatoid features. Histologic necrotic tissue is present. The tumor measures 2.8 cm and extends directly into the adrenal gland.
* Tumor #2: Renal cell carcinoma, clear cell type Fuhrman grade 2. The tumor measures 4.3 cm and extends into the perisinus adipose tissue. Margins widely negative
* Hilar Lymph nodes: Renal cell carcinoma, clear cell type is identified in 2 of the 3 lymph nodes removed.
1. How many primaries are present?
	1. 1 primary per rule M2
	2. 1 primary per rule M9
	3. **2 primaries per rule M10**
	4. 1 primary per rule M11
2. What histology would be assigned to each primary?
	1. **2 primaries. First primary is 8255/3 Adenocarcinoma with mixed subtypes and the second primary is 8310/3 (clear cell carcinoma).**
	2. 2 primaries. First primary is 8310/3 (clear cell carcinoma) second primary 8316/3 cyst-associated renal cell carcinoma.
	3. 1 primary. 8312/3 Renal cell carcinoma
	4. 1 primary. 8310/3 Renal cell carcinoma
3. What surgery code would be used for the case above?
	1. 30 Partial nephrectomy
	2. 40 Complete/total/simple nephrectomy
	3. **50 Radical nephrectomy**
	4. 80 Nephrectomy nos
4. What is Surgical Approach for the case above?
	1. 1 Robotic assisted
	2. **2 Robotic converted to open**
	3. 3 Endoscopic or laparoscopic
	4. 4 Endoscopic or laparoscopic converted to open

## Quiz 2

**Pathology Report**

Final Diagnosis:

* Tumor #1: Renal cell carcinoma.
	+ Tumor size: 2.8 cm
	+ Tumor extension: the tumor extends directly into the adrenal gland
	+ Grade: Fuhrman grade 3 with extensive sarcomatoid features.
	+ Focal histologic necrotic tissue is present.
	+ AJCC pT4
* Tumor #2: Renal cell carcinoma, clear cell type
	+ Tumor Size: 4.3 cm
	+ Tumor extension: the tumor extends into the perisinus adipose tissue.
	+ Fuhrman grade 4
	+ AJCC pT3a
* Hilar Lymph nodes: Renal cell carcinoma, clear cell type is identified in 2 of the 3 lymph nodes removed.

*Per the Multiple primary rules this is one primary with multiple tumors (rule M9).*

1. What is CS Tumor Size?
	1. 028
	2. **043**
	3. 280
	4. 430
2. What is CS Extension for the case above?
	1. 100 Invasive cancer confined to kidney cortex and/or medulla
	2. 460 Renal sinus fat
	3. **630 Ipsilateral adrenal (suprarenal) gland**
	4. 810 Stated as T4 with no other information on extension
3. What is CS Lymph Nodes?
	1. 100 SINGLE regional lymph node: Aortic, NOS, Lateral (lumbar), Para-aortic, Periaortic, Renal hilar, Retroperitoneal, NOS, Regional lymph node(s), NOS
	2. 110 SINGLE regional lymph node: Interaortocaval, Pericaval, NOS, Paracaval, Precaval, Retrocaval
	3. **200 MULTIPLE regional lymph nodes listed in code 100**
	4. 210 MULTIPLE regional nodes, any listed in code 110 WITH or WITHOUT nodes listed in code 100
4. What is CS Mets at DX
	1. **00 No distant metastasis**
	2. 40 Noncontiguous ipsilateral adrenal (suprarenal) gland metastasis
	3. 60 Distant metastasis, NOS
	4. 99 Unknown
5. What is CS SSF 1 *Invasion Beyond Capsule*?
	1. 000 invasion beyond capsule not present/not identified
	2. 010 Lateral invasion: Perinephric fat
	3. 020 Medial invasion: Renal Sinus, perisinus fat
	4. **030 Medial invasion plus lateral invasion 020 + 010**
6. What is SSF 2 *Vein Involvement*?
	1. **000 Vein involvement not present/not identified**
	2. 010 Involvement of renal vein only
	3. 020 Involvement of inferior vena cava (IVC) below the diaphragm only
	4. 999 Unknown
7. What is CS SSF 3 *Ipsilateral Adrenal Gland Involvement*?
	1. 000 Ipsilateral adrenal gland involvement not present/not identified
	2. **Contiguous involvement of ipsilateral adrenal gland**
	3. Noncontiguous involvement of ipsilateral adrenal gland
	4. Involvement of ipsilateral adrenal gland, not stated whether contiguous or noncontiguous
8. What is CS SSF 4 *Sarcomatoid Features*?
	1. 000 Sarcomatoid features not present/not identified
	2. **010 Sarcomatoid features present/identified**
	3. 987 Not applicable: Not a renal cell carcinoma morphology
	4. 999 Unknown
9. What is CS SSF 6?
	1. 010 Grade 1
	2. 020 Grade 2
	3. 030 Grade 3
	4. **040 Grade 4**
10. What is SSF 8 *Extranodal Extension of Regional Lymph Nodes*?
	1. 000 No regional lymph nodes involved
	2. **010 Extranodal extension not present**
	3. 020 Extranodal extension present
	4. 030 Regional nodes involved, unknown if extranodal extension