## 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