## 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