Instructions: We will work together through the following scenarios during the 5/5/11 webinar. An answer sheet will be provided after the live session. Please use CS version 02.03.

#### Case Scenario 1

# Urologist chart including copies of pathology reports

#### 1/3/11

A 72 year old male was found to have a PSA of 4.2 (elevated) on routine screening. His PSA level last year was 2.3 so the level has almost doubled over the last year which is certainly a cause for concern. On digital rectal exam an enlarged +1 prostate that was smooth with no apparent nodules.

Past Medical History: Positive for hypertension. Family History: Negative for urological problems.

Allergy: None.

Review of Systems: Negative.

Physical Exam: Alert, oriented gentleman in no acute distress.

Abdomen: Soft, nontender, no mass, no CVA tenderness.

Penis and testicles: are unremarkable.

Rectum: Prostate is 29 grams and benign. DRE normal.

Urinalysis shows a pH of 5, specific gravity of 1.020 and is otherwise negative.

Negative Bone Scan and CT scan of abd/pelvis.

Due to the doubling of the PSA a transrectal ultrasound with biopsy was recommended.

#### 1/15/11

The patient presents today for a biopsy of his prostate due to an elevated PSA. A transrectal prostate ultrasonography was performed in the usual fashion. Prostate measured  $2.6 \times 5.3 \times 4.5$  cm for a total volume of 31.6 grams. There was a hypoechoic looking lesion near the right apex. This area was biopsied x 2. Subsequent biopsies were performed with 2 biopsies being taken at individual sites for a total of 12 biopsies. The patient tolerated the procedure well.

# Pathology report from biopsy:

# Final Diagnosis:

- 1. Two core specimens labeled "Left middle biopsy"
  - a. Prostatic adenocarcinoma, Gleason's core 3+2=5, involving 10 % of sampled tissue.
- 2. Left apex biopsy, Left base, Right apex, and Right middle biopsies, Right base biopsy

a. Benign prostatic glands and stroma. There are some areas of rare atypical glands, but no definite malignancy identified.

Number cores positive: 2 Total number of cores: 12

Proportion (percent) of prostatic tissue involved by tumor: 10%

# 2/1/11

The patient presents today with his wife to discuss the results of his recent diagnosis of prostate cancer. We had a long discussion concerning the treatment options of prostate cancer. I spent over 45 minutes in counseling. We discussed active surveillance, hormonal therapy, cryotherapy, radiation therapy and surgery. The patient stated he was not interested in pursuing an aggressive treatment regimen at this time and agreed to proceed with active surveillance. As the patient is considered very low risk, this is a reasonable treatment option. The patient understands the risks and benefits of this treatment course.

## 8/1/11

The patient returned for his follow-up DRE. His prostate remains slightly enlarged due to BPH, but benign. A recent PSA was 4.3. We will continue to monitor his PSA quarterly, and he will return in about 6 months for a follow-up DRE.

Stage/ Prognostic Factors								
CS Tumor Size		CS SSF 9						
CS Extension		CS SSF 10						
CS Tumor Size/Ext Eval		CS SSF 11						
CS Lymph Nodes		CS SSF 12						
CS Lymph Nodes Eval		CS SSF 13						
Regional Nodes Positive		CS SSF 14						
Regional Nodes Examined		CS SSF 15						
CS Mets at Dx		CS SSF 16						
CS Mets Eval		CS SSF 17						
		CS SSF 18						
CS SSF 1		CS SSF 19						
CS SSF 2		CS SSF 20						
CS SSF 3		CS SSF 21						
CS SSF 4		CS SSF 22						
CS SSF 5		CS SSF 23						
CS SSF 6		CS SSF 24						
CS SSF 7		CS SSF 25						
CS SSF 8								
Treatment								
Surgery Codes		Radiation Codes						
Surgical Procedure of Primary Site		Radiation Treatment Volume						
Scope of Regional Lymph Node		Regional Treatment Modality						
Surgery								
Surgical Procedure/ Other Site		Regional Dose						
Reason No Surgery		Boost Treatment Modality						
		Boost Dose						
Systemic Therapy Codes		Number of Treatments to Volume						
Chemotherapy		Reason No Radiation						
Hormone Therapy								
Immunotherapy		RX Summ-Treatment Status						
Hematologic Transplant/Endocrine								
Procedure								

# **Urologist chart including copies of pathology reports**

### 3/15/11

A 59 year African American male was referred due to a rising PSA.

3/08 PSA----2.9, 3/09 PSA-----3.2, 4/10 PSA-----4.1, 3/11 PSA-----4.9

# Physical Exam:

Abdomen: benign, no palpable mass in liver or spleen; no hernias in the groin

Anus/Perineum: normal

Digital Rectal Exam: a small nodule involving less than half of the left peripheral zone was noted in an otherwise benign appearing prostate; he has normal sphincter tone.

Scrotum: normal Epididymis: normal Testes: no masses

Penis: circumcised, no lesions were present

**Urethral Meatus: normal** 

The patient has been scheduled for a transrectal ultrasound biopsy of the prostate.

#### 3/17/11

The patient presented for a TRUS prostate biopsy due to an elevated PSA. The patient was placed on the table in the left lateral decubitus position. Standard ultrasonic views of the prostate were obtained. The prostate had a total volume of 24.1 cm. No obvious hypo or hyperechoic lesions were noted. Random biopsies were performed. The patient tolerated the procedure well, and will be called next week with the results.

# **Final Pathology Report-Prostate Biopsy**

Date of procedure 3/17/11

Indication for procedure: Elevated PSA Procedure: Prostate needle biopsies.

5 of 12 cores positive for Adenocarcinoma

Gross and microscopic diagnosis:

Prostate needle biopsies of the left middle (5%), left base (50%), right apex (60%), and right middle (60%), and right base (10%) positive for infiltrating prostatic adenocarcinoma, Gleason's score 3+4= 7.

## 4/4/11

This is a 59 year-old gentleman who was recently diagnosed with prostate adenocarcinoma Gleason 7 (3+4). He is here with his wife. We had a long talk. We discussed stage, grade, prognosis and we reviewed the Sloan-Kettering nomogram. We discussed treatment options including radiation, brachytherapy, and surgical therapy. We discussed open surgery laparoscopic prostatectomy with robotic assistance. We discussed advantages, disadvantages, and success/failure and salvage therapeutic options of all the different options. After extensive discussions the patient opted for robotic assisted prostatectomy.

## Pathology Report

Collection Date: 04/28/2011

Clinical Description: Prostate cancer.

Specimen: 1. Left pelvic lymph nodes. 2. Right pelvic lymph nodes. 3. Prostate

#### **Final Pathology Diagnosis:**

Lymph Node – no tumor seen. 2. Lymph Node – no tumor seen. 3. Prostate and seminal vesicles (Radical Prostatectomy) – moderately differentiated adenocarcinoma, Gleason 6 (3+3) involving right anterior, apex, lateral lobes, left lateral, and left middle lobe no evidence of perineural or lymphovascular invasion, resection margins free of tumor. Focal extracapsular extension. Seminal vesicles – no tumor seen.

Comment: Approximately 3% of the specimen displayed a Gleason tertiary grade 5 pattern.

#### Gross:

- 1. Received in formalin, labeled left pelvic lymph node, is a  $1.5 \times 0.6$  cm possible lymph node with attached fat. Lymph node is entirely submitted in a single cassette.
- 2. Received in formalin labeled right pelvic lymph node is a  $1.8 \times 1.3$  cm possible lymph node with attached fat. Specimen is bisected and entirely submitted in a single cassette.
- 3. Received in formalin is a 37.5 gm,  $4 \times 3.5 \times 3.5$  cm prostate with attached right and left seminal vesicles. The right seminal vesicle measures  $2 \times 1 \times 1.3$  cm. The left seminal vesicle measures  $2 \times 1 \times 1$  cm. This specimen is pink and hemorrhagic. It has a staple line at the anterior aspect of the specimen. The right side of the prostate is inked black. The

left side of the prostate is inked orange. On cut section, the specimen is multinodular, soft, gray-pink, filled with milky white material. Carcinoma involves the right and left sides of the gland, and involves approximately 60% of the gland volume. The carcinoma shows capsular penetration on the right side of the gland, where it extends to the inked tissue margin. Focal perineural invasion is present. The proximal urethral margin, distal urethral margin, seminal vesicles, and vas deferens are negative for malignancy.

# 6/15/2011

The patient has completed his final round of radiation therapy. He received 60Gy to the prostatic bed using IGRT. He has no complaints at this time and his PSA is 0.1. We will continue to monitor is his PSA and he will return if any increases are note.

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CS Extension			CS SSF 10					
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CS SSF 6			CS SSF 24					
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Hormone Therapy			Reason No Radiation					
Immunotherapy								
Hematologic Transplant/Endocrine			RX Summ-Treatment Status					
Procedure								

#### **Urologist Chart**

#### 3/11/11

A 70-year-old man presented to his primary care physician with a four-month history of gradually progressive severe right hip pain and stiffness, restricting physical activities and walking. Both passive and active movements aggravated the pain, causing a complete restriction in walking. The patient denied any urinary symptom. Tumor marker studies revealed an elevated level of PSA at 174 ng/ml. Due to the elevated PSA he was referred to my office.

Past medical history included type II diabetes mellitus, atrial fibrillation, hypercholestrolemia, COPD, and coronary artery disease. The patient's family history was significant for a history of unknown type of cancers; his father died of such a cancer at the age of 45. Significant findings on physical examination included tenderness over the anterolateral region of the right upper thigh. The prostate was mildly enlarged and appeared to be smooth, normal in texture, and with no nodules by digital rectal exam. Laboratory data revealed a normal complete blood count and chemistry panel.

A transrectal ultrasound-guided prostate needle biopsy revealed prostate adenocarcinoma, with Gleason's score of 3+4=7, involving 7 of 13 cores; approximately 50% of the total prostatic tissue was positive for malignancy.

Alkaline phosphatase was elevated at 210 U/L.

A plain AP-view radiograph of the pelvis and right hip showed osteolytic metastatic lesions in the superior aspect of the right pelvis. An MRI imaging of the right hip pre- and post-gadolinium administration revealed multiple osteoblastic metastases to the pelvis.

The patient was started on LHRH-agonist, Goserelin, along with antiandrogen Bicalutamide and palliative radiation therapy to the bone.

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Procedure								