# Prostate Case Scenarios

## Scenario 1

69-year-old male presented with rising PSA, 8.78 ng/mL. DRE abnormal, with nodule on LT lobe. SV not palpable. Pt denies hematuria or flank pain. Reports nocturia and weak stream.

12/2/18: prostate core bx (12 cores) =

* LT Lat: prostatic adenocarcinoma, GS: 3+3=6
* LT Apex: prostatic adenocarcinoma, GS: 3+4= 7
* LT mid: prostatic adenocarcinoma, GS: 3+3= 6
* RT mid: prostatic adenocarcinoma, GS: 4+3= 7
* RT apex: prostatic adenocarcinoma, GS: 3+4= 7
* Seven cores negative for malignancy.

12 cores total

12/9/20: CT AP: mild thickening along LT peripheral zone. No abdominopelvic lymphadenopathy.

Patient declined surgery and opted for EBRT.

**RT Completion Summary**

* Region treated: Pelvis, prostate, prostate and SV. Technique: RArc.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Txt Site** | **Total Dose** | **Modality** | **Dose/fx** | **Fx** | **Start**  | **End**  |
| Pelvis | 4500 cGy | 6X | 180 | 25 | 12/26/18 | 2/27/19 |
| Prostate CD1 | 2160 cGy | 6X | 180 | 12 |  |  |
| Prostate CD2 | 1260 cGy | 6X | 180 | 7 |  |  |

|  |
| --- |
| Radiation-Scenario 1 |
|  | Phase 1 | Phase 2 | Phase 3 |
| Rad Primary Treatment Volume |  |  |  |
| Rad Treatment Modality |  |  |  |
| Radiation to Draining Lymph Nodes |  |  |  |
| Ext Beam Rad Planning Technique |  |  |  |
| Dose per Fraction |  |  |  |
| Number of Fractions |  |  |  |
| Total Dose |  |  |  |
| # of Phases of Rad Tx to this Volume |  |
| Rad Treatment Discontinued Early |  |
| Total Dose |  |
| Reason no Radiation  |  |
| Scenario 1 |
| Primary Site |  |  |  | Clinical Grade |  |
| Histology |  |  |  | Pathological Grade |  |
| Behavior |  |  |  | Post Therapy Grade |  |
|  |  |
| Stage Data items |
| AJCC Stage |
| Clinical T |  | Pathological T |  | Post-therapy T |  |
| cT Suffix |  | pT Suffix |  | pT Suffix |  |
| Clinical N |  | Pathological N |  | Post-therapy N |  |
| cN Suffix |  | pN Suffix |  | pN Suffix |  |
| Clinical M |  | Pathological M |  | Post-therapy M |  |
| Clinical Stage  |  | Pathological Stage |  | Post-therapy Stage |  |
| *PSA: 8.78 GS: 4+3 7* |  |  |
| Summary Stage 2018  |  |
| *EOD Primary Tumor* |  |
| *EOD Lymph Regional Nodes* |  |
| *EOD Mets* |  |
| *Prostate Pathologic Extension* |  |
| SSDI’s |
| Gleason Patterns Clinical |  |
| Gleason Patterns Pathological |  |
| Gleason Score Clinical |  |
| Gleason Score Pathological |  |
| Gleason Tertiary Pattern |  |
| Number of Cores Positive |  |
| Number of Cores Examined |  |
| PSA |  |

## Scenario 2

75-year-old male presented with rising PSA, 10.6 ng/mL. DRE normal, with no induration palpated. SV not palpable. Pt denies hematuria or flank pain. Patient denies any urinary symptoms other than nocturia.

Prostate core bx:

1. LT apex lat: benign prostate tissue
2. LT mid lat: benign prostate tissue
3. LT base lat: benign prostate tissue
4. LT apex: benign prostate tissue
5. LT mid: benign prostate tissue
6. LT base: prostatic adenocarcinoma, GS: 3+3=6, one out of two cores involved
7. RT apex: benign prostate tissue
8. RT mid: prostatic adenocarcinoma, GS: 4+3= 7, one out of two cores involved
9. RT base: prostatic adenocarcinoma, GS: 3+3= 7, 80% of tissue
10. RT apex lat: benign prostate tissue
11. RT mid lat: benign prostate tissue
12. RT base lat: prostatic adenocarcinoma, GS= 3 + 4= 7, 70% of tissue

14 cores total

12/9/20: CT AP: mild thickening along LT peripheral zone. No abdominopelvic lymphadenopathy.

Patient declined surgery and opted for EBRT.

**RT Completion Summary**

* Patient opted for EBRT via Tomotherapy with SpaceOAR gel and prostate seed implants, via I-125 seeds (total seeds= 75).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Txt Site** | **Total Dose** | **Modality** | **Dose/fx** | **Fx** | **Start**  | **End**  |
| Prostate/SV/Nodes | 4500 cGy | 10X/Tomo | 180 | 25 | 5/1/18 | 6/5/18 |
| Prostate | 10,999 | I-125 seeds |  | 1 | 6/11/18 | 6/11/18 |

|  |
| --- |
| Radiation-Scenario 2 |
|  | Phase 1 | Phase 2 | Phase 3 |
| Rad Primary Treatment Volume |  |  |  |
| Rad Treatment Modality |  |  |  |
| Radiation to Draining Lymph Nodes |  |  |  |
| Ext Beam Rad Planning Technique |  |  |  |
| Dose per Fraction |  |  |  |
| Number of Fractions |  |  |  |
| Total Dose |  |  |  |
| # of Phases of Rad Tx to this Volume |  |
| Rad Treatment Discontinued Early |  |
| Total Dose |  |
| Reason no Radiation  |  |

|  |
| --- |
| Scenario 2 |
| Primary Site |  |  |  | Clinical Grade |  |
| Histology |  |  |  | Pathological Grade |  |
| Behavior |  |  |  | Post Therapy Grade |  |
|  |  |
| Stage Data items |
| AJCC Stage |
| Clinical T |  | Pathological T |  | Post-therapy T |  |
| cT Suffix |  | pT Suffix |  | pT Suffix |  |
| Clinical N |  | Pathological N |  | Post-therapy N |  |
| cN Suffix |  | pN Suffix |  | pN Suffix |  |
| Clinical M |  | Pathological M |  | Post-therapy M |  |
| Clinical Stage  |  | Pathological Stage |  | Post-therapy Stage |  |
| *PSA: GS:*  |  |  |
| Summary Stage 2018  |  |
| *EOD Primary Tumor* |  |
| *EOD Lymph Regional Nodes* |  |
| *EOD Mets* |  |
| *Prostate Pathologic Extension* |  |
| SSDI’s |
| Gleason Patterns Clinical |  |
| Gleason Patterns Pathological |  |
| Gleason Score Clinical |  |
| Gleason Score Pathological |  |
| Gleason Tertiary Pattern |  |
| Number of Cores Examined |  |
| Number of Cores Positive |  |
| PSA |  |

## Scenario 3

72-year-old male who presented with abnormal DRE, nodule on LT-hand side, normal seminal vesicle, with normal PSA at 1.6. Patient reports minor obstructive voiding symptoms. Intermediate risk prostate cancer.

5/6/2020: Prostate core bx

1. Prostate, LT base: prostatic tissue with focal high grade prostatic intraepithelial neoplasia (HGPIN),
2. Prostate, LT mid: adenocarcinoma of prostate. GS= 7(4+3), involving 60% of tissue, 1 out of 2 cores involved by tumor,
3. Prostate, LT apex: adenocarcinoma of prostate. GS= 7(4+3), involving 90% of tissue, 2 out of 2 cores involved by tumor,
4. Prostate, RT base: benign prostatic tissue,
5. Prostate, RT mid: benign prostatic tissue,
6. Prostate RT apex: small fragment suspicious for prostatic adenocarcinoma.

8 Cores total

**5/10/20: MRI pelvis**: Lesion in LT mid-gland to apex peripheral zone and transitional zone with features consistent with prostate cancer. No evidence of pelvic lymphadenopathy.

5/18/20: Robotic-assisted radical prostatectomy

**Procedure:** Radical prostatectomy

**Histologic Type: A**denocarcinoma, mixed acinar and ductal type

**Histologic Grade**

**Grade Group and Gleason Score:** Grade group 3 (Gleason score 4 + 3)

**Percentage of Pattern 4 in Gleason Score 7:** 70%

**Percentage of Pattern 5:** 0%

**Tumor Quantitation:** Carcinoma present on 14 of 20 histologic

 sections; dominant tumor nodule measures 2.0 cm

**Extraprostatic Extension (EPE):** Not identified

**Urinary Bladder Neck Invasion:** Not identified

**Seminal Vesicle Invasion:** Not identified

**Margins:** Negative for carcinoma

**Treatment Effect on carcinoma:** No known presurgical therapy

**Lymphovascular Invasion:** Not identified

**Regional Lymph Nodes:** Uninvolved by tumor

 **Number of Lymph Nodes Involved:** 0

 **Number of Lymph Nodes Examined:** 2

**Additional Pathologic Findings:** High grade prostatic intraepithelial

 neoplasia

|  |
| --- |
| Scenario 3 |
| Primary Site |  |  |  | Clinical Grade |  |
| Histology |  |  |  | Pathological Grade |  |
| Behavior |  |  |  | Post Therapy Grade |  |
|  |  |
| Stage Data items |
| AJCC Stage |
| Clinical T |  | Pathological T |  | Post-therapy T |  |
| cT Suffix |  | pT Suffix |  | pT Suffix |  |
| Clinical N |  | Pathological N |  | Post-therapy N |  |
| cN Suffix |  | pN Suffix |  | pN Suffix |  |
| Clinical M |  | Pathological M |  | Post-therapy M |  |
| Clinical Stage  |  | Pathological Stage |  | Post-therapy Stage |  |
| *PSA: GS:* |  |  |
| Summary Stage 2018  |  |
| *EOD Primary Tumor* |  |
| *EOD Lymph Regional Nodes* |  |
| *EOD Mets* |  |
| *Prostate Pathologic Extension* |  |
| SSDI’s |
| Gleason Patterns Clinical |  |
| Gleason Patterns Pathological |  |
| Gleason Score Clinical |  |
| Gleason Score Pathological |  |
| Gleason Tertiary Pattern |  |
| Number of Cores Positive |  |
| Number of Cores Examined |  |
| PSA |  |