

## SmartPhrase List for M.D., DAVID MICHAEL ROSENBERG M.D.

---

### ANALPLAN

T\*\*\*N\*\*\*M0 anal squamous cell carcinoma. @HE@ is medically fairly healthy otherwise.

1. We discussed the natural history of anal cancer. If untreated, it is possible that @HE@ would experience progressive local or distant symptoms which if uncontrolled could lead to death. We discussed treatment options including radiation therapy alone, chemo/radiation, and surgery. We recommended therapy with 5FU/Mitomycin C/IMRT.
2. The primary goal of radiation therapy in this setting is cure. We expect a \*\*\*medium/high likelihood of achieving this goal. A primary chemo/RT treatment would offer the chance for sphincter preservation, in comparison to abdominoperineal resection. Meanwhile, dual agent chemotherapy with RT has been proven to lead to better disease control than RT alone.
3. The logistics and possible side effects of radiation therapy were discussed. Treatment would go over a continuous 6 weeks, Monday through Friday, and require about 1 hour in our department for each treatment. Acute toxicity could include skin irritation and desquamation, diarrhea, urinary frequency or urgency, dysuria, dehydration, and fatigue. There is a chance that @HE@ may need a treatment break or hospitalization as a result of this therapy. Late toxicity could arise months or even years after the completion of therapy and could include changes to the bowels, bladder, hips including sacrum and femoral heads, and vaginal canal\*\*\*, which can be mild to moderate or severe. Severe toxicity may include damage to the bowel such obstruction , which requires further workup and/or intervention to attempt to correct. @HE@ understands that there is a risk of severe and permanent damage to any irradiated tissue, although the risk of such damage is very low. Regarding the risks of radiation therapy, @HE@ had an opportunity ask questions, all of which were answered to @HIS@ satisfaction.
4. After hearing the above, @HE@ felt most comfortable proceeding with chemo/RT. A Port has already been placed yesterday. We have scheduled RT planning for 4/17/14. We will coordinate @HIS@ treatment start with medical oncology, tentatively for 4/28/14.
5. We will consider ordering a bone mineral density study at baseline to screen for osteopenia or osteoporosis which could be treated to reduce the risk of radiation related pelvic bone issues.

---

### BLADDERPLAN

with cT\*\*\*N\*\*\*M0 urothelial carcinoma of the bladder wall s/p TURBT who is seen in consultation to discuss treatment options.

1. We discussed the natural history of muscle-invasive bladder cancer. If untreated, it is possible that his tumor will recur locally and/or distantly. We discussed treatment options including neoadjuvant cisplatin-based neoadjuvant chemotherapy followed by radical cystectomy, TURBT alone, radical cystectomy alone, and definitive concurrent chemoradiation therapy (5FU, MMC). We discussed that due to his age and the perioperative mortality associated with radical cystectomy, he is a poor candidate for cystectomy. We recommend concurrent chemoradiation therapy.
2. The primary goal of radiation therapy in this setting is for cure. We expect a medium likelihood of achieving this goal. We recommended concurrent chemotherapy with radiation (chemoRT), since studies have shown that concurrent chemotherapy with radiation increases the chance for disease control.
3. The logistics and possible side effects of radiation therapy were discussed. Treatment would likely go over a continuous 4 weeks, Monday through Friday, and require about 1 hour in our department for each treatment. Acute toxicity from radiation therapy could include diarrhea, increased frequency of stools, rectal urgency, increased frequency of urination, incomplete bladder emptying, urinary urgency, and fatigue. Late toxicity could arise months or even years after the completion of therapy and could include changes to bowel and bladder, which can be mild to moderate or severe. Severe toxicity may include bowel obstruction, cystitis, and/or dysfunction in bladder filling/emptying, which requires further workup and/or intervention to attempt to correct. He understands that there is a risk of severe and permanent damage to any irradiated tissue, although the risk of such damage is very low (<5%). Regarding the risks of radiation therapy, he had an opportunity ask questions, all of which were answered to his satisfaction.

4. After hearing the above, he felt most comfortable pursuing chemoRT. Informed consent was obtained.

5. We will arrange for CT simulation within next week and coordinate treatment with Dr. \*\*\*.

---

CEALAST5  
@LASTLAB(CEA:5)@

---

CTCLPLAN

pics were taken

CT

sezary cells

Sézary cell analysis: \*\*\*

\*\*\*Send requisition including pt info, flow cytometry for sezary, purple top tube (print out e-order and write out)

--

@NAME@ is a @AGE@old @SEX@ patient who presents with cutaneous T cell lymphoma, s/p treatment with focal RT to the head and neck, and interferon therapy. Disease appears to be involving \*\*\*.

Based on the information available to us today, he would be staged: T1-4N1-3M0-1B0-2\*\*\* based upon an evaluation of the skin (T), lymph nodes (N), visceral involvement (M), and blood (B). Approximately \*\*\*% of his skin is involved with tumor.

@HE@ would be a candidate to receive total skin electron beam (TSEB) therapy for management of his skin lesions which can progress and impact his quality of life. TSEBT is a reasonable consideration given the recent history of progression of disease, after failing other skin treatment including \*\*\* RT and \*\*. TSEB has a good chance of providing relief of his symptoms and offering local control of his disease. The chance for a complete response in the skin is ~85-90% for early stage disease and 50-75% for advanced stage disease, with complete response occurring during or shortly after treatment. Unfortunately, by one year after therapy relapses can occur in ~50%. We plan to deliver 32 Gy to the total skin with a 24 Gy boost as needed to underdosed regions.

We reviewed the logistics of total skin treatment. We specifically discussed the rationale, risks, benefits, alternatives, as well as possible acute and chronic toxicities of radiation therapy, including erythema, desquamation, alopecia, blisters, skin pain, hyperpigmentation. Lesions can become superinfected. A one week break at the mid point of therapy may be necessary depending on acute side effects of therapy. Late effects on the skin and glands can affect loss of fingernails (usually 2-4 months afterwards), and ability to sweat, which can lead to chronically dry skin. It is possible that some areas will have permanent alopecia or telangiectasias. @HE@ understands there can be severe and permanent damage to any irradiated tissue. \*\*\*We discussed the possibility that this prior radiation could affect his long term tolerance of the proposed treatment. @HE@ had an opportunity to ask questions, all of which were answered to his satisfaction. \*\*\* was amenable to proceeding with radiation therapy and informed consent was obtained and placed in his medical record.

We will tentatively have him return to our department on

--miscellaneous notes

estimate body surface area involvement with palm = 1%

Adult

Anatomic structure Surface area

<u>Anterior head</u>	4.5%
<u>Posterior head</u>	4.5%
<u>Anterior torso</u>	18%
<u>Posterior torso</u>	18%
<u>Anterior leg, each</u>	9%
<u>Posterior leg, each</u>	9%
<u>Anterior arm, each</u>	4.5%
<u>Posterior arm, each</u>	4.5%
<u>Genitalia/perineum</u>	1%

**Skin (T)**

T<sub>1</sub> Limited patches\*, papules, and/or plaques\* covering <10 percent of the skin surface; may further stratify into T<sub>1a</sub> (patch

only) versus T<sub>1b</sub> (plaque ± patch)

T<sub>2</sub> Patches, papules, or plaques covering ≥10 percent of the skin surface; may further stratify into T<sub>2a</sub> (patch only) versus T<sub>2b</sub> (plaque ± patch)

T<sub>3</sub> One or more tumors<sup>A</sup> (≥1 cm diameter) [T<sub>3</sub> means stage IIIB or greater]

T<sub>4</sub> Confluence of erythema covering ≥80 percent body surface area [T<sub>4</sub> means stage III or greater]

#### **Node (N)**

N<sub>0</sub> No clinically abnormal lymph nodes<sup>◊</sup>; biopsy not required

N<sub>1</sub> Clinically abnormal lymph nodes; histopathology Dutch grade 1 or NCI LN0-2 N<sub>1a</sub> Clone negative<sup>§</sup> N<sub>1b</sub> Clone positive<sup>§</sup>

N<sub>2</sub> Clinically abnormal lymph nodes; histopathology Dutch grade 2 or NCI LN3 N<sub>2a</sub> Clone negative<sup>§</sup> N<sub>2b</sub> Clone positive<sup>§</sup>

N<sub>3</sub> Clinically abnormal lymph nodes; histopathology Dutch grades 3-4 or NCI LN4; clone positive or negative

N<sub>x</sub> Clinically abnormal lymph nodes; no histologic confirmation

#### **Visceral (M)**

M<sub>0</sub> No visceral organ involvement

M<sub>1</sub> Visceral involvement (must have pathology confirmation<sup>¥</sup> and organ involved should be specified)

#### **Blood (B)**

B<sub>0</sub> No significant blood involvement: ≤5 percent of Sézary cells. For clinical trials, B<sub>0</sub> may also be defined as <250/microL

Sézary cells; CD4+CD26- or CD4+CD7- cells or CD4+CD26- and CD4+CD7- cells <15 percent by flow cytometry. B<sub>0a</sub>

Clone negative B<sub>0b</sub> Clone positive

B<sub>1</sub> Low blood tumor burden: Does not meet the criteria of B<sub>0</sub> or B<sub>2</sub> B<sub>1a</sub> Clone negative B<sub>1b</sub> Clone positive

B<sub>2</sub> High blood tumor burden: Positive clone<sup>‡</sup> plus one of the following: ≥1000/microL Sézary cells; CD4/CD8 ≥10; CD4+CD7- cells ≥40 percent; or CD4+CD26- cells ≥30 percent. For clinical trials, B<sub>2</sub> may also be defined as >1000/microL CD4+CD26- or CD4+CD7- cells. [B<sub>2</sub> means IVa]

Sézary syndrome is equivalent to the T<sub>4</sub> (erythroderma) plus B<sub>2</sub> (≥1000 Sézary cells/microL) designation in the TNMB classification syndrome for mycosis fungoides, with clonal TCR rearrangement in the blood identified by PCR or southern blot analysis

---

#### **DRGENPLAN**

who presents with \*\*\* [include the most essential elements of the case only that impact risk stratification/prognosis, and affect radiation decision making]

1. We discussed the natural history of \*\*\* cancer. If untreated, it is possible that \*\*\*. We discussed treatment options including radiation therapy, \*\*\*.
2. The primary goal of radiation therapy in this setting is \*\*\*. We expect a \*\*\* (low, medium, or high; you can also include a % range estimate) likelihood of achieving this goal.  
[discuss the choices and which might be best suited for this case, including clinical trial options; include difficulties which may exist in making this recommendation; convey how the patient was counseled]
3. The logistics and possible side effects of radiation therapy were discussed. Treatment would go over a continuous \*\*\* weeks, Monday through Friday, and require about 1 hour in our department for each treatment. Acute toxicity could include \*\*\*, and fatigue. Late toxicity could arise months or even years after the completion of therapy and could include changes to \*\*\*, which can be mild to moderate or severe. Severe toxicity may include \*\*\*, which requires further workup and/or intervention to attempt to correct. @HE@ understands that there is a risk of severe and permanent damage to any irradiated tissue, although the risk of such damage is very low. Regarding the risks of radiation therapy, @HE@ had an opportunity ask questions, all of which were answered to @HIS@ satisfaction.
4. After hearing the above, @HE@ felt most comfortable \*\*\*
5. [list other recs here; if there are updated labs please include; cc relevant MDs]

---

#### **DRINC**

=====INCOMPLETE NOTE=====

---

#### **DRNAME**

**David M. Rosenberg, MD, PGY2**

Department of Radiation and Cellular Oncology

Extension 22873

Pager 90234

---

DRO

\*\*\*OLD

---

DRONCHX

Oncologic History

---

DRPE

Speech is fluent and coherent, and cognition is normal. Mood and affect are appropriate. Gait and station are unremarkable. Respiratory effort is normal. Digital rectal exam deferred today.

---

DRPHENC

**Telephone Encounter**

@NAME@ was called back as @HE@ requested. His identity was confirmed using two identifiers (phone number and date of birth).

[\*\*\*What we discussed\*\*\*]

@CAPHE@ expressed understanding of the discussion and was grateful for the call.

@drname@

---

DRPLANPANCREAS

@NAME@ is a @AGE@ old @SEX@ patient who presents with locally advanced, borderline-resectable pancreatic cancer status post\*\*\* cycles of \*\*\* with \*\*\* response.

1. We discussed the natural history of borderline-resectable pancreatic cancer. If untreated, it is likely that disease will progress, either locally and/or distantly. Treatment options include surgery, radiation therapy alone, chemoRT, chemotherapy only, or observation. The best outcomes generally come with margin-negative surgery, but at this time, it is uncertain if this is possible based on the CT imaging.

2. The primary goal of radiation therapy in this setting is to downstage the tumor and help improve the likelihood of complete surgical resection. We talked about the role of radiation therapy in the setting of borderline resectable disease. Randomized data in the up front setting show that concurrent chemoradiation can improve the chance for margin negative resection compared to no up front therapy. There is a moderate likelihood of local control with standard concurrent chemoradiation as stand-alone therapy without surgery, in case @HE@ cannot proceed to have it.

---

3. The logistics and possible side effects of radiation therapy were discussed. Treatment with chemoradiation would occur on a Monday-Friday schedule over 5 weeks. Treatment would involve ~1 hour in our department for each session. Acute toxicity could include fatigue, skin irritation, nausea, vomiting, abdominal cramping, or weight loss. Late toxicity could arise months or even years after the completion of therapy and could include changes to the small bowel, which can be mild to moderate or severe. Severe toxicity may include ulceration or obstruction, which requires further workup and/or intervention to attempt to correct. There is a risk of severe and permanent damage to any irradiated tissue, although the risk of such damage is low. Regarding the risks of radiation therapy, @HE@ had an opportunity ask questions, all of which were answered her satisfaction. Informed consent was obtained.

4. Hearing the above, @HE@ was most comfortable proceeding with radiation planning on \*\*\*. @HE@ will be NPO for 2 hr and we can use @HIS@ port for IV contrast for planning. We will coordinate with medical oncology in scheduling treatments. \*\*\*Informed consent was obtained.

---

#### DRRECTALPREOPPLAN

is a @AGE@ old @SEX@ patient who presents with a rectal adenocarcinoma, uT\*\*\*N\*\*\*. @CAPHE@ has a history of \*\*\*

We reviewed his history and discussed that the standard of care for locally advanced rectal cancer is neoadjuvant chemoradiation prior to surgery. The risk of local recurrence after surgery alone is probably around 15-20% but that the addition of radiation reduces this risk by about 50%. The concurrent chemotherapy, typically 5-FU based, acts as a radiosensitizer to improve the effect of the radiation. More recently data has supported a "total neoadjuvant" approach which includes moving the systemic chemotherapy prior to consideration of surgery. For his case, we discussed an approach of long course chemoRT (although short course 5 Gy x 5 is also an option) and systemic chemotherapy, with the order to be determined after multidisciplinary discussion. The advantage of long course chemoRT may be that the response rate could be better, especially when timed prior to the systemic chemotherapy. A downside to this approach compared to short course RT may be the delayed receipt of systemic chemotherapy. We also discussed the possibility of non-operative management if he has a complete clinical response. This is not necessarily considered a standard management option but has been explored in recent studies including one that we enrolled onto which followed patients with clinical complete response using sigmoidoscopy and MRI. The results of this program have yet to be published but roughly ~50% of patients enrolled had a complete clinical response after total neoadjuvant therapy.

The logistics of radiation were discussed including an initial simulation scan followed by daily radiation from Monday to Friday for a period of 5-6 weeks. Acute side effects include increased frequency or changes in bowel and bladder movements. Diarrhea can be treated with dietary modification or medications if necessary. There may be skin irritation and hair loss in the irradiated field, as well as fatigue that is cumulative. We did discuss that his current symptoms related to his cancer may actually improve as his tumor responds to treatment. There is a ~10% chance that he may require hospitalization during treatment, which would most likely be due to dehydration, failure to thrive, or pain control. Long-term side effects can occur months to years after treatment and can include changes to his bowel and bladder movements. There is a low percentage of patients (<5% of patients) who may develop serious, radiation-related side effects including small bowel obstruction or dysfunction of the bowel or bladder. As the femoral heads/sacrum will receive some dose, there is also a risk of insufficiency fracture. We also discussed that there may be a decline in sexual health due to the radiation, and the chance that the radiation or chemotherapy could induce infertility. \*\*\*He and his wife note that their family planning is complete. All questions were answered.

We will discuss his care with our multi-disciplinary team and if he starts with radiation, we will schedule a radiation planning study.

[list clinical trial options here]

\*\*\* Another option we discussed is enrollment on a randomized study investigating neoadjuvant FOLFOX without radiation (N1048). The idea behind this study is to give upfront aggressive chemotherapy to treat both local and systemic disease initially instead of only in the adjuvant setting. Those who respond well to chemotherapy (radiographically) would proceed to surgery alone, which would avoid the side effects of radiation. We did discuss that he does have local symptoms and it is uncertain how effective systemic therapy would be in relieving these (as opposed to local radiation therapy), but that he would eventually get surgery either way. We also discussed that the reason for this trial is that it is unknown if outcomes could be equivalent or better with this new regimen while sparing patients from another modality of treatment with associated toxicities.

---

**DRREVSTUD**  
**Radiology Studies**

**Pathology Studies**

**Cardiac Studies**

---

**DRSLCONSULTPX**  
**{ISVV:5544}**

Type of Note: {TYPE OF NOTE:222160}

Patient Name: @NAME@  
MRN / CSN: @MRN@ / @CSN@  
Date of Birth / Age: @DOB@ - @AGE@  
Encounter Date: @ED@

**CARE TEAM**

Encounter Provider: @ENCPROVNMTITLE@  
Referring Physician (if known): @REFPROV@  
PCP (if known): @PCP@

**VISIT DIAGNOSIS**

@DIAGX@

**SUBJECTIVE**

@NAME@ is a @AGE@ old @SEX@ patient who presents with \*\*\*.

**HISTORY OF PRESENT ILLNESS**

\*\*\*

@PXHISTORY@

**PAST MEDICAL, SURGICAL, SOCIAL, AND FAMILY HISTORY**

@PMH@  
@PSH@  
@SOCHX@  
@FAMHX@

\*\*\*Work/retired

\*\*\*Who lives with

\*\*\*How spends time

**ALLERGIES AND ADVERSE DRUG REACTIONS**

@ALG@

**CURRENT MEDICATIONS**

---

@CMED@

**OBJECTIVE**

@ROSBYAGE@

@PHYEXAMBYAGE@  
@MULTIPLEVITALS@

Last recorded pain score (if available): **@FLOW(710069)@**

**ECOG:**\*\*\*

**REVIEW OF LABORATORY DATA**

I have reviewed the following:

@LABCBCDIFF@	@LABCMP@
--------------	----------

@LASTLABBRIEF[PSATOTAL:20@

**REVIEW OF ANCILLARY STUDIES**

I have reviewed the following:

**RADIOLOGIC STUDIES:**

**ASSESSMENT & PLAN**

@NAME@ is a @AGE@ old @SEX@ patient who presents with \*\*\*.

@drname@

---

**DRSLOLIGO**

1. We discussed the natural history of oligometastatic prostate cancer, which he seems to have on the basis of his records available to us today. We discussed the natural history of oligometastatic prostate cancer. If untreated, it is possible that it may progress to more widely disseminated metastasis and/or his cancer may develop progressive castrate resistance. We discussed treatment options, including radiation therapy to the prostate and/or to the metastatic sites (typically with hormonal therapy, known as ADT) or continuing ADT alone.
2. The primary goal of radiation therapy to the prostate is to potentially improve overall survival, prostate-cancer specific survival, and prevent further metastatic progression, based on extrapolation from a large Phase III randomized trial (STAMPEDE). The primary goal of radiation therapy to oligometastatic sites is to provide local control of the metastatic lesions (and improve progression free survival) and possibly decrease further metastatic spread, based on recent Phase II data (ORIOLE, STOMP trials). We expect a moderate to high likelihood of achieving this goal.
3. The logistics and possible side effects of radiation therapy were discussed with him. EBRT could go over a continuous 4 weeks, Monday through Friday, and require about 1 hour in our department for each treatment. Acute toxicity could include urinary frequency, dysuria, urinary urgency, increased bowel movement frequency, rectal urgency, and fatigue (for treatment to the prostate). Acute toxicity for RT to the metastatic sites would have \*\*\* toxicities. Late toxicity could arise months or even years after the completion of therapy and could include changes to urinary and bowel habits, which can be mild to moderate (5-20%) or severe (~2-5%). Severe toxicity may include hematuria, or hematochezia, which requires further workup and/or intervention to attempt to correct. Additionally there is a moderate risk for decline in sexual function after radiation therapy, which may occur gradually, and may or may not respond to sexual medicines or devices. Additional late toxicity for RT to the metastatic sites include the possibility of \*\*\*. He understands that there is a risk of severe and permanent damage to any irradiated tissue, although the risk of such damage is very low. There is a 0.5% risk

of radiation-related secondary cancer over a 15-year period. Regarding the risks of radiation therapy, he had an opportunity to ask questions, all of which were answered to his satisfaction. If we proceed to radiation planning, we may recommend placement of gold fiducial markers to assist with patient alignment during radiation treatment. We will schedule this on the same day of the CT simulation in our department.

4. After hearing the above, he felt most comfortable \*\*\*

---

#### DRSLPXHYPO

PTV1 = (modified pelvic vessels + 1.5 cm) + (prostate +SV + 1 cm). PTV2 = prostate + 5-8 mm. We anticipate treating PTV1 to 44 Gy and PTV2 to 64 Gy in 20 fractions. This fractionation scheme is being used to reduce his treatment time, due to the desire to reduce exposure to COVID19. The dose of 64 Gy in 20 fx has a BED3 of 132, more similar our standard fractionation prostate dose of 79.2 Gy at 1.8 fx (BED3 127) than 60 Gy in 20 fractions (BED3 120).

Initial planning directives - these are translated from conventional fractionation of a 78 Gy/2fx prescription to match a hypofractionated regimen

Target or Tissue (priority)	Parameter	Target
PTV2 (++++)	V100% (%)	None
	V95% (%)	≥ 99%
	V105%	≤ 20%
	V110%	≤ 10%
	Max dose to voxel	≤ 120%
Rectum (++++)	V60Gy (%)	<5%
	V54Gy (%)	≤ 20% but aim for <10%
	V50Gy (%)	≤ 40% but aim for <20%
	V30Gy (%)	≤ 80% but aim for <40%
Bladder (++)	V54Gy	≤ 30% but aim for <15%
	V50Gy	≤ 60% but aim for <30%
	V30Gy (%)	≤ 80% but aim for <60%
Femoral heads (+)	V38Gy (%)	≤ 10%
Penile bulb (++)	V38Gy	≤ 50%

---

#### DRSLSUMMARYGEN

#### RADIATION ONCOLOGY COMPLETION SUMMARY

PATIENT: @NAME@

Requesting Physician: Dr. @REFPROVLNAME@, Department of \*\*\*

PCP: Dr. @PCP@

Attending Physician: Dr. Stanley Liauw

Resident Physician: Dr. David M. Rosenberg

Diagnosis: @DIAGX@

History summary: @NAME@ is a @AGE@ old @SEX@ with a history of \*\*\*ONELINER\*\*\*. We saw @HIM@ in consultation and recommended radiation therapy with \*\*\*. @CAPHE@ was in agreement with this treatment plan.

#### SUMMARY OF RADIATION THERAPY

Region Treated	Radiation Energy	Min. Tumor Dose (Gy)	Date From	Date To
----------------	------------------	----------------------	-----------	---------

---

\*\*\*DELETEME: @radiation@

**Total cumulative dose:** \*\*\* Gy in \*\*\* Gy fractions

**Representative isodose lines:**

Axial picture here

Coronal or sagittal picture here

**Treatment Summary:** Signed informed consent was obtained prior to the start of treatment. Treatment positioning, and target volumes and organs at risk were delineated as described in his radiation treatment planning note. @CAPHE@ was treated with {?DRIMRT:5628} plan to doses above. @CAPHE@ received treatment once daily, Monday through Friday, to a cumulative dose of \*\*\* Gy. \*\*\*

Overall, @NAME@ tolerated radiation treatment well. There were {?No:5697} treatment related breaks. Toxicities included Skin \*\*\*, Large bowel: \*\*\*, Nausea: \*\*\*, Vomiting: \*\*\*, Bladder: \*\*\*. @CAPHE@ required {?No:5697} medications to manage these side effects. Labs were monitored and remained stable throughout treatment.

**Follow-up Instructions:** @NAME@ was given a follow-up appointment for \*\*\*. He also will follow up with \*\*\*. Appropriate skin care instructions were given. @CAPHE@ was instructed to notify us with any significant changes in function or performance status, or with any future questions or concerns.

@DRNAME@

---

DRSLSUMMARYPX

#### RADIATION ONCOLOGY COMPLETION SUMMARY

**PATIENT:** @NAME@

**Requesting Physician:** Dr. {URO - Surgeon:228890}, Department of Urology  
**PCP:** Dr. @PCP@

**Attending Physician:** Dr. Stanley Liauw

**Resident Physician:** Dr. David M. Rosenberg

**Diagnosis:**

{Intact or postop prostate summary:5566}

**History summary:** @NAME@ is a @AGE@ old @SEX@ with a history of adenocarcinoma of the prostate. We saw @HIM@ in consultation and recommended radiation therapy with {Adjunct therapy with EBRT for prostate cancer:5569:::0}. @CAPHE@ was in agreement with this treatment plan.

#### **SUMMARY OF RADIATION THERAPY**

Region Treated	Radiation Energy	Min. Tumor Dose (Gy)	Date From	Date To
----------------	------------------	----------------------	-----------	---------

\*\*\*DELETEME: @radiation@

**Total cumulative dose:** \*\*\* Gy in \*\*\* Gy fractions

**Representative isodose lines:**

Axial picture here

Coronal or sagittal picture here

**Treatment Summary:** Signed informed consent was obtained prior to the start of treatment. Treatment positioning, and

target volumes and organs at risk were delineated as described in his radiation treatment planning note. @CAPHE@ was treated with {?DRIMRT:5628} plan to doses above. @CAPHE@ received treatment once daily, Monday through Friday, to a cumulative dose of \*\*\* Gy. {SLSUM\_ADJUNCT (Optional):5570}

Overall, @NAME@ tolerated radiation treatment well. There were no\*\*\* treatment related breaks. Toxicities included Skin {DRCTCAELEVEL:5629}; Large bowel {DRCTCAELEVEL:5629}; Bladder {DRCTCAELEVEL:5629}. @CAPHE@ required \*\*\*no medications to manage these side effects. Labs were monitored and remained stable throughout treatment.

**Follow-up Instructions:** @NAME@ was given a follow-up appointment for \*\*\*. He also will follow up with \*\*\*. Appropriate skin care instructions were given. @CAPHE@ was instructed to notify us with any significant changes in function or performance status, or with any future questions or concerns.

@DRNAME@

---

#### EXAMNORMAL

Cranial nerves 2-12 are grossly intact. Speech is fluent and coherent, and cognition is normal. Mood and affect are appropriate. Gait and station are unremarkable. Respiratory effort is normal. Digital rectal exam (is deferred OR shows a \*\*\* prostate with no nodules and no rectal masses).

---

#### GENFOLLOWUPNOTE

#### RADIATION ONCOLOGY FOLLOW-UP NOTE

**Diagnosis:** (include all the relevant info so that another resident meeting the patient for the first time knows exactly what the clinical setting is)

**Duration Since Treatment:** \*\*\* years, \*\*\* months since completion of RT in \*\*\*.

**Region Treated:**

**Patient Status:** (Doing well OR clinically stable)

**Tumor Status/Treated Volume:** No evidence of active disease

**Narrative:** @NAME@ returns today for routine followup. @HE@ was last seen here in \*\*\*. Since that time @HE@ has had no new problems.

@HE@ denies any new major medical symptoms otherwise, including pain. He follows up regularly with his primary care physician.

@CMEDBRIEF@

**Physical Examination:** @V@ Cranial nerves 2-12 are grossly intact. Speech is fluent and coherent, and cognition is normal. Mood and affect are appropriate. Gait and station are unremarkable. Respiratory effort is normal.

**X-Rays and Laboratory Studies:** Labs were drawn today.

**Impression and Recommendations:** @NAME@ is doing well. We will see @HIM@ again in \*\*\* months. Late toxicity grades today are grade \*\*\* for GI, grade \*\*\* for GU, and grade \*\*\* for sexual dysfunction.

---

#### GENPLAN

who presents with \*\*\* [include the most essential elements of the case only that impact risk stratification/prognosis, and affect radiation decision making]

1. We discussed the natural history of \*\*\* cancer. If untreated, it is possible that \*\*\*. We discussed treatment options including radiation therapy, \*\*\*.
  2. The primary goal of radiation therapy in this setting is \*\*\*. We expect a \*\*\* (low, medium, or high; you can also include a % range estimate) likelihood of achieving this goal.  
**[discuss the choices and which might be best suited for this case, including clinical trial options; include difficulties which may exist in making this recommendation; convey how the patient was counseled]**
  3. The logistics and possible side effects of radiation therapy were discussed. Treatment would go over a continuous \*\*\* weeks, Monday through Friday, and require about 1 hour in our department for each treatment. Acute toxicity could include \*\*\*, and fatigue. Late toxicity could arise months or even years after the completion of therapy and could include changes to \*\*\*, which can be mild to moderate or severe. Severe toxicity may include \*\*\*, which requires further workup and/or intervention to attempt to correct. @HE@ understands that there is a risk of severe and permanent damage to any irradiated tissue, although the risk of such damage is very low. Regarding the risks of radiation therapy, @HE@ had an opportunity ask questions, all of which were answered to @HIS@ satisfaction.
  4. After hearing the above, @HE@ felt most comfortable \*\*\*
  5. [list other recs here; if there are updated labs please include; cc relevant MDs]
- 

#### HOTFLASHSURVEY

**Hot Flash Survey completed on:**

#### **Hot Flash Related Daily Interference Scale**

Please circle one number to the right of each phrase to describe how much DURING THE PAST WEEK hot flashes have INTERFERED with each aspect of your life. Higher numbers indicate more interference with your life. If you are not experiencing hot flashes or if hot flashes did not interfere with these aspects of your life, please mark zero to the right of each question.

	Do not interfere										Completely interfere	
1. Work (work outside the home and housework)	0	1	2	3	4	5	6	7	8	9	10	
2. Social activities (time spent with family, friends, etc.)	0	1	2	3	4	5	6	7	8	9	10	
3. Leisure activities (time spent relaxing, doing hobbies, etc.)	0	1	2	3	4	5	6	7	8	9	10	
4. Sleep	0	1	2	3	4	5	6	7	8	9	10	
5. Mood	0	1	2	3	4	5	6	7	8	9	10	
6. Concentration	0	1	2	3	4	5	6	7	8	9	10	
7. Relations with others	0	1	2	3	4	5	6	7	8	9	10	
8. Sexuality	0	1	2	3	4	5	6	7	8	9	10	
9. Enjoyment of life	0	1	2	3	4	5	6	7	8	9	10	
10. Overall quality of life	0	1	2	3	4	5	6	7	8	9	10	

**Please respond to each question or statement by marking one box per row.**

In the past 7 days...

	Very poor	Poor	Fair	Good	Very good
My sleep quality was	<input type="checkbox"/>				
In the past 7 days...	Not at all	A little bit	Somewhat	Quite a bit	Very much
My sleep was refreshing...	<input type="checkbox"/>				
I had a problem with my sleep...	<input type="checkbox"/>				
I had difficulty falling asleep...	<input type="checkbox"/>				

In the past month, on average how often do you experience hot flashes in a 24 hour period? \_\_\_\_\_

In the past month, please circle a number to rate the severity of your hot flashes on a scale of 0 (not at all) to 10 (extremely) scale.

0      1      2      3      4      5      6      7      8      9      10

In the past month, on average how long does each hot flash last? \_\_\_\_\_

#### IORTNOTE

#### PROCEDURE NOTE - INTRAOPERATIVE RADIATION THERAPY

Date of procedure: \*\*\*

Attending surgeon/radiation oncologist: \*\*\*/\*\*\*

Clinical history and indication for IORT: @NAME@ is a @AGE@ year old with a diagnosis of \*\*\*. Full history is detailed in a separate radiation oncology consultation note. In brief, @HE@ has a history of \*\*\*

Time when decision was made to proceed with IORT: \*\*\*

Time when applicator was removed and radiation portion was considered completed: \*\*\*

Dose given: \*\*\* Gy prescribed to 1 cm depth from source

Tumor bed PTV: \*\*\* cm x \*\*\* cm (treated with \*\*\* channels with \*\*\* dwell positions each)

Site treated: \*\*\*

The surgical cavity was examined by attending surgeon and radiation oncologist. \*\*\*describe discussion/decision to proceed.

Surgical clips were placed at four positions to denote a rectangular area felt to be at risk for local recurrence. A 4 channel HAM applicator was attempted to be inserted into this cavity. However, the space was too narrow to have the applicator lay flat against tissue. The HAM applicator was then cut down to a 3 channel width. This was introduced in the surgical cavity. The applicator appeared to lay against the sacrum (S1-3) and curved slightly to include a portion of the R pelvic sidewall, which was also felt to have some risk of residual disease. The area was relatively dry and effort was made to minimize air gaps beneath the applicator. Applicator positioning was secure. Lead (4x4x0.125 inches, folded once against itself), was wrapped in wet gauze and contained within sterile plastic, and positioned anteriorly to the applicator to protect the bladder. The R ureter was not felt to be under the applicator.

\*\*\*consider inserting a picture 1) of the cavity and 2) applicator in place with annotation as needed

At the completion of the radiation delivery, his surgical operation continued, to be described in the separate operative note from Dr. \*\*\*.

Stanley Liauw, MD

#### IORTPLAN

We reviewed his history and discussed the rationale for surgery and intra-operative RT (IORT) following his recent neoadjuvant CRT. We explained that due to the location of the recurrence and its proximity to pelvic side wall/sacrum, complete resection may not be possible. Thus, we explained that IORT might be helpful if the surgeon has any concerns about the margin of resection. We explained that the role of IORT in this setting would be to improve local control, since a local recurrence could have significant morbidity and may be very difficult to successfully salvage.

The logistics of intra-operative radiation were discussed. We explained that we would coordinate with Dr. \*\*\* to deliver a single dose of radiation therapy immediately following his re-resection on \*\*\*. This would be delivered using a high dose rate brachytherapy unit with a flexible applicator with multiple channels through which radiation would pass. This procedure would add roughly 1 hour to the time for surgery. We discussed the risks of radiation therapy. He may experience delayed wound healing due to the radiation. Long-term side effects can occur months to years after treatment and can include changes to his bowel, bladder, nerves, or ureter. There is a low percentage of patients (<10% of patients) who may develop serious, radiation-related side effects including small bowel obstruction, dysfunction of the bowel or bladder, persistent neuropathy, or ureteral stricture or obstruction.

3) We will coordinate with Dr. \*\*\* and will plan to be available for possible IORT during his resection.

4) All questions were answered today. Informed consent for radiation therapy was signed today. Consent has been provided to participate in our long-term outcomes study including database registry.

#### IRBDBASE

Consent has been provided to participate in our long-term outcomes study including database registry.

#### LAST5PSA

@LASTLAB(PSATOTAL:5,SPSA:5)@

#### PANCREASPLANSBRT

with locally advanced, unresectable (cT4N0M0) pancreatic cancer s/p 12 cycles of FOLFIRINOX with partial response.

1. We discussed the natural history of unresectable pancreatic cancer. If untreated, it is likely that disease will progress, either locally and/or distantly. We discussed treatment options including radiation therapy alone, chemoRT, chemotherapy only, or observation. @he@ understands that there is some uncertainty as to whether radiation has been proven to help improve survival in the setting of unresectable disease.

2. The primary goal of radiation therapy in this setting is local control. We talked about the role of radiation therapy in the setting of unresectable disease. Randomized data on this subject are conflicting, and at least state that the risk benefit ratio is narrow. In this setting of no metastatic progression after chemotherapy, with persistent radiographic local disease, it is possible that improvement of local control can translate to a benefit in survival. We discussed two regimens by which radiation may be delivered: (1) As part of our institutional phase I protocol delivering stereotactic body radiation therapy (SBRT) alone, or (2) a more traditional concurrent chemoradiation regimen to be delivered in 6 weeks, or hypofractionated to be delivered in 4 weeks. We expect a moderate likelihood of local control with standard concurrent chemoradiation. It is our hope that the higher RT dose per fraction will increase the likelihood of local control; SBRT for pancreatic cancer has been supported by other published analyses.

3. The logistics and possible side effects of radiation therapy were discussed. Treatment with SBRT would involve delivery of 3 fractions of radiation on an every-other-day schedule over the span of 1 week. Treatment as part of traditional chemoradiation would occur on a Monday-Friday schedule over 6 weeks. For both options, treatment would involve ~1 hour in our department for each session. Acute toxicity could include fatigue, skin irritation, nausea, vomiting, abdominal cramping, or weight loss. Late toxicity could arise months or even years after the completion of therapy and could include changes to the small bowel, which can be mild to moderate or severe. Severe toxicity may include ulceration or obstruction, which requires further workup and/or intervention to attempt to correct. He understands that there is a risk of severe and permanent damage to any irradiated tissue, although the risk of such damage is very low. The risk of severe

toxicity is perhaps slightly higher with the SBRT regimen; however, he understands that the study seeks to establish safety and that data are not yet available to compare it with more standard therapy. Regarding the risks of radiation therapy, he had an opportunity ask questions, all of which were answered to his satisfaction.

4. After hearing the above, he felt comfortable \*\*\*

5. Labs (CBC, CMP, CA19-9) were drawn today and are above.

5. He will have gold fiducials placed into the pancreas by GI prior to simulation. This will help ensure accurate setup during treatment. He will be referred to GI for the procedure.

---

#### PCALL

Please call and let him know about the \*\*\* results

---

#### PLDANAL

Initial planning directives

Target or Tissue (priority)	Parameter	Target
PTV (++++)	V100% (%)	$\geq 95\%$
	V95% (%)	$\geq 99\%$
	V110%	$\leq 5\%$
	Max dose to voxel	$\leq 115\%$
Small bowel (+++)	V50Gy	$\leq 10 \text{ cc}$
Bladder (++)	V40Gy (%)	$\leq 80\%$
Femoral heads (+)	V50Gy (%)	$\leq 10\%$
Bone marrow (+)	V40Gy (%)	$\leq 40\%$
	V20 Gy (%)	$\leq 75\%$
	V10Gy (%)	$\leq 90\%$
	V30 Gy	$>750 \text{ cc}$
External genitalia	V40Gy	$<40\%$

---

#### PLDBLADDER

Initial planning directives

Planning directives are adapted from the BC2001 study (James et al., NEJM, 2012). Dose prescription is either 55 Gy/20 fractions, or 64 Gy/32 fractions to the PTV. In general, PTV = bladder (including extravesical tumor) + 1.5 cm margin.

PTV: V95% > 99%

V105% < 10%

Max dose to voxel < 115%

Rectum: Posterior aspect of rectum receives less than 80% of the total dose

Femoral heads: Mean dose < 80% of the total dose

-alternate

PTV: V95% > 99%

V105% < 10%

Max dose to voxel < 115%

Rectum: Posterior half of rectum receives less than 80% of the total dose

Small bowel: V45 Gy < 90 cc (RTOG 0822)

---

V40 Gy < 130 cc (RTOG 0822)  
V35 Gy < 230 cc (RTOG 0822)  
Rectum: Posterior ½ <80% total dose  
V30Gy < 50% (RTOG 0712)  
V55Gy < 10% (RTOG 0712)  
Femoral heads: Mean dose <80% total dose  
V50Gy < 20% (RTOG 0712)

---

## PLDGASTRIC

### Initial planning directives

PTV: V95% > 99%  
V105% < 10%  
Max dose to voxel < 115%  
Kidney: Combined kidneys V20 Gy < 50%  
Small bowel: V45 Gy < 5 cc to small bowel outside of the PTV  
Liver: V30 Gy < 30%  
Spinal cord: Max dose 45 Gy

---

## PLDGENERAL

### Initial planning directives:

PTV: V100% ≥ 95%  
V110% ≤ 5%  
Max dose ≤ 115%  
\*\*\*: \*\*\*

---

## PLDHYP03

Initial planning directives - these are translated from conventional fractionation of a 78 Gy/2fx prescription to match a hypofractionated regimen

Target or Tissue (priority)	Parameter	Target
PTV (++++)	V100% (%)	None
	V95% (%)	≥ 99%
	V105%	≤ 20%
	V110%	≤ 10%
	Max dose to voxel	≤ 120%
Rectum (+++)	V60Gy (%)	<5%
	V54Gy (%)	≤ 20% but aim for <10%
	V50Gy (%)	≤ 40% but aim for <20%
	V30Gy (%)	≤ 80% but aim for <40%
Bladder (++)	V54Gy	≤ 30% but aim for <15%
	V50Gy	≤ 60% but aim for <30%
	V30Gy (%)	≤ 80% but aim for <60%
Femoral heads (+)	V38Gy (%)	≤ 10%
Penile bulb (++)	V38Gy	≤ 50%

---

## PLDPANCREAS

Initial planning directives:

---

PTV1-PTV2: V100%  $\geq$  95%  
 V110%  $\leq$  25%  
 Max dose  $\leq$  135%  
 PTV2: V100%  $\geq$  85%  
 V110%  $\leq$  10%  
 Max dose  $\leq$  115%  
 Total Kidney: V20 Gy  $<$  50%  
 Liver: V30 Gy  $<$  30%  
 Duodenum: V50Gy  $<$  2 cc  
 Small bowel, other: V50Gy  $<$  2 cc  
 Cord: max <45 Gy

---

### PLDPX1

#### Initial planning directives

Target or Tissue (priority)	Parameter	Target
PTV (++++)	V100% (%)	$\geq$ 98%
	V95% (%)	$\geq$ 99%
	V105%	$\leq$ 10%
	V110%	$\leq$ 5%
	Max dose to voxel	$\leq$ 115%
Rectum (+++)	V70Gy (%)	$\leq$ 10%
	V65Gy (%)	$\leq$ 20%
	V40Gy (%)	$\leq$ 40%
Bladder (++)	V70Gy	$\leq$ 15%
	V65Gy	$\leq$ 30%
	V40Gy (%)	$\leq$ 60%
Femoral heads (+)	V50Gy (%)	$\leq$ 10%
Penile bulb (++)	V50Gy	$\leq$ 50%

---

### PLDPX2

#### Initial planning directives

Target or Tissue (priority)	Parameter	Target
PTV (++++)	V100% (%)	None
	V95% (%)	$\geq$ 99%
	V105%	$\leq$ 20%
	V110%	$\leq$ 10%
	Max dose to voxel	$\leq$ 120%
Rectum (+++)	V70Gy (%)	$\leq$ 20% but aim for <10%
	V65Gy (%)	$\leq$ 40% but aim for <20%
	V40Gy (%)	$\leq$ 80% but aim for <40%
Bladder (++)	V70Gy	$\leq$ 30% but aim for <15%
	V65Gy	$\leq$ 60% but aim for <30%
	V40Gy (%)	$\leq$ 80% but aim for <60%
Femoral heads (+)	V50Gy (%)	$\leq$ 10%
Penile bulb (++)	V50Gy	$\leq$ 50%

---

### PLDPXHYPO

Initial planning directives - these are translated from conventional fractionation of a 78 Gy/2fx prescription to match a hypofractionated regimen

Target or Tissue (priority)	Parameter	Target
-----------------------------	-----------	--------

---

PTV (++++)	V100% (%)	$\geq 98\%$
	V95% (%)	$\geq 99\%$
	V105%	$\leq 10\%$
	V110%	$\leq 5\%$
	Max dose to voxel	$\leq 115\%$
Rectum (+++)	V54Gy (%)	$\leq 10\%$
	V50Gy (%)	$\leq 20\%$
	V30Gy (%)	$\leq 40\%$
Bladder (++)	V54Gy	$\leq 15\%$
	V50Gy	$\leq 30\%$
	V30Gy (%)	$\leq 60\%$
Femoral heads (+)	V38Gy (%)	$\leq 10\%$
Penile bulb (++)	V38Gy	$\leq 50\%$

#### PLDPXHYPO2

PTV1 = (modified pelvic vessels + 1.5 cm) + (prostate +SV + 1 cm). PTV2 = prostate and proximal 1 cm SV + 5-8 mm. We anticipate treating PTV1 to 44 Gy and PTV2 to 64 Gy in 20 fractions. This fractionation scheme is being used to reduce his treatment time, due to the desire to reduce exposure to COVID19. The dose of 64 Gy in 20 fx has a BED3 of 132, more similar our standard fractionation prostate dose of 79.2 Gy at 1.8 fx (BED 127) than 60 Gy in 20 fractions (BED3 120).

Initial planning directives - these are translated from conventional fractionation of a 78 Gy/2fx prescription to match a hypofractionated regimen

Target or Tissue (priority)	Parameter	Target
PTV2 (++++)	V100% (%)	None
	V95% (%)	$\geq 99\%$
	V105%	$\leq 20\%$
	V110%	$\leq 10\%$
	Max dose to voxel	$\leq 120\%$
Rectum (+++)	V60Gy (%)	<5%
	V54Gy (%)	$\leq 20\%$ but aim for <10%
	V50Gy (%)	$\leq 40\%$ but aim for <20%
	V30Gy (%)	$\leq 80\%$ but aim for <40%
Bladder (++)	V54Gy	$\leq 30\%$ but aim for <15%
	V50Gy	$\leq 60\%$ but aim for <30%
	V30Gy (%)	$\leq 80\%$ but aim for <60%
Femoral heads (+)	V38Gy (%)	$\leq 10\%$
Penile bulb (++)	V38Gy	$\leq 50\%$

#### PLDPXHYPO3

Target or Tissue (priority)	Parameter	Target
PTV (++++)	V100% (%)	$\geq 98\%$
	V95% (%)	$\geq 99\%$
	V105%	$\leq 10\%$
	V110%	$\leq 5\%$
	Max dose to voxel	$\leq 115\%$
Rectum (+++)	V63 Gy	$\leq 5\%$ , prefer <3%
	V58 Gy	$\leq 15\%$
	V54 Gy	$\leq 30\%$
	V50 Gy	$\leq 50\%$ , prefer <35%
	V42 Gy	$\leq 60\%$ , prefer <50%

Bladder (++)	V33 Gy	Prefer <65%
	V25 Gy	Prefer <80%
	V63 Gy	≤ 5%
	V58 Gy	≤ 35%, prefer <5%
	V54 Gy	≤ 50%
	V50 Gy	Prefer <25%
	V42 Gy	Prefer <50%
Bowel (++)	V54 Gy	0 cc
	V50 Gy	<6 cc, prefer <0.5 cc
	V46 Gy	<28 cc, prefer <14 cc
	V42 Gy	<110 cc, prefer <17 cc
	V38 Gy	<158 cc, prefer <78 cc
Femoral heads (+)	V42 Gy	≤ 25%, prefer <5%
Penile bulb (++)	V50 Gy	Prefer <10%
	V42 Gy	Prefer ≤ 50%

#### PLDPXSBRT

Target/Organ (Priority)	DVH metric	Primary Goal [secondary goal]
PTV1, includes SV (+++)	V100%	>95% [<>90%]
	V95%	>95% [<>90%]
PTV2, includes prostate (+++)	V40 Gy	>95% [<>90%]
	Max dose	<115% [<<125%]
GTV prostate (record only, anticipate >95%)	V100%	
Rectum (++++)	D 0.03 cc	39 Gy [40 Gy]
	D 1cc	38 Gy [39 Gy]
	D 3cc	30 Gy [35 Gy]
	D10%	20 Gy [30 Gy]
	D20%	10 Gy [20 Gy]
	D50%	5 Gy [10 Gy]
Bladder (++)	D 0.03 cc	39 Gy [40 Gy]
	V20 Gy	20% [30%]
Femoral heads (++)	D 1cc	15 Gy [20 Gy]
	D 10 cc	12.5 Gy [15 Gy]
Penile bulb (++)	D 0.03 cc	30 Gy [36.25 Gy]
	D 3 cc	15 Gy [20 Gy]
Urethra (+)	Max dose	<105% [<<110%]

#### PLIRECTUM

Initial planning directives:

PTV: V100% ≥ 95%  
V110% ≤ 5%  
Max dose ≤ 115%

Bladder: V40 Gy ≤ 80%

Femoral Heads: V50 Gy ≤ 10%

Small Bowel: V45 Gy as low as possible

Per MSKCC protocol guidelines:

PTV1: Max dose < PTV50 max dose

V50 Gy < 10%  
D95% > 45 Gy  
V42.75 Gy ~ 100%

PTV2: max dose < 56 Gy  
D95% > 50 Gy

PTV3: max < 59.4 Gy

Bowel D5% < 50 Gy  
Bladder Max < 56 Gy  
Femurs max 50 Gy  
Cauda Max 50 Gy  
Vagina V45 Gy < 50%

---

#### PLIRECTUMSC

Per Washington University in St. Louis Protocol (Myerson IJROBP 2014)

PTV: V95% ≥ 95%  
V110% ≤ 5%  
Max dose ≤ 115%

Small bowel maximum point dose (out of PTV) 25 Gy

Small bowel V20 Gy < 50cc

Aim for steep dose gradient at small bowel and bladder

Femurs max 22 Gy

---

#### PXBRAHYNOTE

#### BRACHYTHERAPY PROCEDURE NOTE

**Preoperative Diagnosis:** Adenocarcinoma of the prostate, \*\*\*

**Postoperative Diagnosis:** Adenocarcinoma of the prostate, \*\*\*

**Date of Surgery:** \*\*\*

**Surgeon:** Stanley L. Liauw, M.D. and Gregory Zagaja, M.D.

**Procedure:** Transperineal implantation of Iodine 125 into the prostate under transrectal ultrasound and template guidance.

Prior to the procedure, Iodine 125 seeds were loaded into 18 gauge implant needles. The correct seed count, strength, and distribution were verified as \*\*\* Iodine \*\*\*125 seeds of \*\*\*0.xxx mCi. The total activity (\*\*\*19.459 mCi) was distributed in the following manner:

#### Number of Needles/Seeds per Needle:

\*\*\*needle with one seed.

\*\*\*needles with two seeds each.

\*\*\*needles with three seeds each.

\*\*\*needles with four seeds each.

**Description of Procedure:** The patient underwent general anesthesia and was placed in the dorsolithotomy position with knees flexed at \*\*\*90 degrees. The perineum was prepped with Betadine solution and draped. A Foley catheter was inserted under sterile conditions. Approximately 120 cc of a mixture of contrast and saline were introduced into the bladder. The catheter was connected to an aerated KY-Jelly solution and inserted loosely into the fossa navicularis and kept in place with 2 cc of saline in the balloon. The scrotum was elevated and secured using a loban. The legs and lower pelvis were covered with sterile drapes and the area of the perineum was cut out for exposure. The ultrasound probe (BK, transrectal probe serial #3127855, Model E14C14B) was attached to the stepper apparatus, which was secured to the table. The intraoperative prostate ultrasound volume was then matched to the preoperative volume study. At each transverse image plane, the position of the prostate relative to the template grid was matched to the preplanned position. On this plan, there were \*\*\*nine visualized slices from the base at 0.0 to the apex at \*\*\*4.0 cm. \*\*\* needles at row \*\*\* were first inserted up into the base in order to obtain a measurement at the base retraction plane. Fluoroscopy was used at this point and throughout the implant in order to verify alignment of the seed placement. A measurement of

the template to needle hub distance was made to serve as reference of the base retraction plane throughout the implant. Each individually preloaded needle was inserted through the perineum according to the pre-specified template coordinate. Needle targeting was done at the mid gland under real time ultrasound guidance, and position was agreed on by the urologist and radiation oncologist. The needle was then guided into the appropriate retraction plane relative to the base of the prostate and was confirmed by both imaging with the ultrasound probe in the axial view and a measurement of the template to needle edge distance. Fluoroscopy was also used as needed as a third check. The first seed was moved to the tip of each preloaded needle by positioning the stylette to match the known train length of the seeds and spacers. The stylette was held stationary while the needle was then slowly withdrawn using a rotating movement, thereby leaving behind a row of seeds in the cephalad-caudal direction within the prostate. This procedure was repeated for each of the needles with great care being taken to ensure placement of the seeds in the appropriate retraction plane. Progression of seed placement went from the anterior to posterior portion of the gland consisting of \*\*\*seven total rows of seed needles being placed. Upon placing needles in the posterior most row, care was taken to avoid placement of the needles in the rectal wall. This was done with sagittal imaging as necessary leaving approximately 3 mm of space between the posterior part of the prostate and rectum. \*\*\*Pubic arch interference was not an issue during the procedure. At the end of the case, good seed distribution was noted by ultrasound and fluoroscopy. The total number of seeds placed was \*\*\* out of \*\*\* planned. There did not appear to be any seeds in the bladder. A fluoroscopy image of the implant and prostate was saved electronically. The ultrasound probe and stepper were removed. The catheter was removed. The perineum was clear of any active bleeding or hematoma by the end of the procedure.

The patient tolerated the operative procedure well and was transferred to the recovery room in stable condition. The operating room was subsequently surveyed and found to be free of radioactive sources by the end of the procedure.

**Number of Seeds in the Bladder:** None.

**Number of Seeds Evacuated in the Urine:** None.

**Total Number of Seeds in the Prostate:** \*\*\* of \*\*\* planned.

**Activity of Individual Seeds:** \*\*\*0.xxx mCi.

**Complications:** None.

**Estimated Blood Loss:** Less than 20 cc.

**Pubic Arch Interference:** \*\*\*

**Angulation Technique Required:** None.

**Fluoroscopy Findings:** Excellent distribution of seeds.

**Follow-up Instructions:** @NAME@ will follow up in clinic with both Dr. Liauw and Dr. Zagaja. He was encouraged to contact the clinic with any questions or concerns. Specific discharge instructions were given to him. He was placed on antibiotics for one week.

---

## PXCOMPPARE

The COMPPARE study was discussed. This is a study comparing quality of life outcomes for men who are treated with photon versus proton therapy for prostate cancer. Participation would require completing quality of life surveys at specific time points, with some financial reimbursement provided to the patient from the study. He did \*\*\* not wish to participate in the COMPPARE study.

---

## PXFIDIMPLANT

### PROCEDURE NOTE: TRANSRECTAL IMPLANTATION OF GOLD (FIDUCIAL) MARKERS

Mr. @NAME@ is a @AGE@-year-old gentleman with adenocarcinoma of the prostate. He will undergo radiation therapy to treat this prostate cancer. He had taken a rectal enema and antibiotic prior to coming in for the procedure this morning. He was not taking any anticoagulants. Transrectal ultrasound (BK machine #5014378, biplane probe serial #3127140, Model E14C4t) was introduced in order to visualize the prostate. The prostate gland measured \*\*\* cm in craniocaudal dimension. Approximately 5 cc of 2% lidocaine without epinephrine was used to anesthetize the prostate at the junction of the prostatic base and seminal vesicles (along the neurovascular bundles) bilaterally. Then, 3 separate 22G needles containing preloaded gold seeds (Gold Anchor, GA200-10-B, 1 cm x 0.4 mm) were inserted to place the markers in one after the other. Gold markers were implanted at the right base, left mid-gland, and right apex. He tolerated this well. There was minimal bleeding. He will complete a short course of antibiotics.

\*\*\* put any note regarding unusual anatomy in the body of the text

---

## PXFOLLOWUPNOTE1

## RADIATION ONCOLOGY FOLLOW-UP NOTE

**Diagnosis:** Adenocarcinoma of the prostate, PSA \*\*\*, Gleason \*\*\*+\*\*\*, with \*\*\* of \*\*\* biopsy cores involved, clinical T\*\*\*, treated with \*\*\* Gy and \*\*\* months of hormone therapy. Last injection was in \*\*\*.

Alternative for post-op: Adenocarcinoma of the prostate, PSA \*\*\*, status post radical prostatectomy in \*\*\*, pT\*\*\*N\*\*\*, Gleason score \*\*\*+\*\*\*, (positive OR negative) surgical margins. Treated for post-operative PSA of \*\*\* with \*\*\* Gy and \*\*\* months of hormonal therapy, last injection in \*\*\*.

**Duration Since Treatment:** \*\*\* years, \*\*\* months since completion of RT in \*\*\*.

**Region Treated:** Prostate and (seminal vesicles OR pelvic lymph nodes)

**Patient Status:** (Doing well OR clinically stable)

**Tumor Status/Treated Volume:** No evidence of active disease

**Narrative:** @NAME@ returns today for routine followup. He was last seen here in \*\*\*. Since that time he has had no new problems.

His IPSS score is \*\*\*/35 with nocturia x\*\*\*. He has no incontinence, dysuria, or hematuria. His bowel movements are normal with no blood in the stool or diarrhea. He has \*\*\* bowel movements per day. The last known colonoscopy occurred: \*\*\* with recommended follow-up in \*\*\* years. He is \*\*\* sexually active. His SHIM score is \*\*\*/25.

He denies any new major medical symptoms otherwise, including pain. He follows up regularly with his primary care physician, Dr \*\*\*.

@CMEDBRIEF@

**Physical Examination:** @V@ Cranial nerves 2-12 are grossly intact. Speech is fluent and coherent, and cognition is normal. Mood and affect are appropriate. Gait and station are unremarkable. Respiratory effort is normal. Digital rectal exam shows \*\*\* no nodules and no rectal masses.

**X-Rays and Laboratory Studies:** PSA was drawn today.

@LAST5PSA@

\*\*\* BMD:

**Impression and Recommendations:** He is doing well. His PSA is controlled. We will see him again in \*\*\* months.

His toxicity grades over the last interval of follow-up are grade \*\*\* for GI, grade \*\*\* for GU, and grade \*\*\* for sexual dysfunction.

include if appropriate:\*\*\*Consent has been provided to participate in our long-term outcomes study including database registry.

---

### PXGU009

\*\*\*We discussed the NRG GU009 trial, which is a phase 3 risk adapted clinical trial for men with NCCN high risk prostate cancer. We discussed that the trial consists of Decipher risk score adapted treatment de-intensification or intensification using variations of combination hormonal therapy and EBRT. Men with a Decipher risk in the lower 2/3 of Decipher genomic risk (<0.85) can be treated with 12 months ADT plus RT instead of 24 months ADT+RT. Men in the upper 1/3 of Decipher genomic risk (>0.85) or have node-positive disease by conventional imaging (MRI or CT scan) will have treatment intensification with apalutamide and abiraterone acetate with prednisone added to the standard of RT plus 24 months ADT. He was \*\*\* interested in enrollment, and was given information on the study.

---

### PXHEMATURIA

We discussed the hematuria (likely from radiation cystitis), what might promote this to happen, and what to do if it recurs (drink fluids, avoid heavy physical exertion, hold elective anticoagulation; seek medical attention if large volume). He could consider cystoscopy for recurrent bleeds or heavy bleeding. He is a \*\*\* non smoker.

## PXHIFU

We briefly discussed the role of HIFU and FLA for his case. We discussed that these techniques are not as well established as a radical prostatectomy or radiation and are not considered a standard of care. We discussed that these procedures are typically more favorable from a side effect standpoint, but the control is neither considered to be standard nor as effective. We did not recommend these treatment options if he is interested in a curative approach.

---

## PXHISTORY

His IPSS score is \*\*\*/35 with nocturia x\*\*\*. He has no incontinence, dysuria, or hematuria. His bowel movements are normal with no blood in the stool or diarrhea. He has \*\*\* bowel movements per day. The last known colonoscopy occurred: \*\*\* with recommended follow-up in \*\*\* years. He is \*\*\* sexually active. His SHIM score is \*\*\*/25.

He denies any new major medical symptoms otherwise, including pain. He follows up regularly with his primary care physician, Dr \*\*\*.

---

## PXINJECT

### PROCEDURE NOTE: TRANSRECTAL INTRAPROSTATIC INJECTION

Mr. @NAME@ is a @AGE@-year-old gentleman with adenocarcinoma of the prostate. He will undergo radiation therapy to treat this prostate cancer on the prostatek study.

He was due for an intra-prostatic injection today (#\*\*\* of 3). He had taken a rectal enema and antibiotic prior to coming in for the procedure this morning. He was not taking any anticoagulants. Transrectal ultrasound (Hitatchi, simultaneous biplane probe, Serial # KE14996901B, Model EUP-CC531) was introduced in order to visualize the prostate. Approximately 5 cc of 2% lidocaine without epinephrine was used to anesthetize the prostate at the junction of the prostatic base and seminal vesicles (along the neurovascular bundles) bilaterally. There was \*\*\*no obvious lesion seen to correlate with the position of the tumor on MRI at the \*\*\*peripheral gland. Then, a 22G needle containing 2 mL of solution was inserted in four locations (right and left base, right and left apex). There was minimal bleeding. He will complete a short course of antibiotics.

---

## PXINTACTPLAN

adenocarcinoma of the prostate, PSA \*\*\*, cT\*\*\*, Gleason score \*\*\*, \*\*\*/12 cores. He is medically \*\*\* healthy.

1. We discussed the natural history of \*\*\*-risk prostate cancer, which he seems to have on the basis of his records available to us today. We spoke of the option of active surveillance as weighed against local treatment. This discussion is justified as it can be difficult to estimate how to relate the natural history of cancer progression with the life expectancy of the individual. Surveillance would imply a q6 month clinic visit with repeat PSA and clinical exam (at least until clinical stability is proven, perhaps over the first year), and then repeat prostate biopsy as often as q1year. The primary benefit of this approach is that he may avoid the quality of life problems which could arise with local treatment, which would possibly not even help improve his survival given the greater probability that he would die of a non-cancer cause. The primary disadvantage is that he may eventually need local treatment and a delay in therapy could compromise his chance for cure.

In his case, we recommended \*\*\* (local therapy or surveillance; add another sentence as necessary to be patient specific). He was most comfortable to proceed with [list his choice here].

\*\*\*optional if he chooses surveillance: However, he does understand that there is a chance that this cancer may not compromise his quality of life or life expectancy if untreated, given his age, and that he is more likely to die of reasons other than prostate cancer.

2. We discussed local therapy options, including radical prostatectomy, external beam RT (EBRT), and seed implant or brachytherapy. Each of these has perhaps a \*\*\*% chance of biochemical control at 5 years, and a \*\*\* (moderate or high) likelihood of durable control beyond that. Surgical risks include difficulty with continence and sexual function. Radiation

---

risks include irritation to the bladder and bowel as well as an effect on sexual function. In the long term, risks of severe side effects are similar with either approach.

**[discuss the choices and which might be best suited for this case, including clinical trial options]**

3. The logistics and possible side effects of radiation therapy were discussed with him. EBRT would go over a continuous 4-8 weeks, Monday through Friday, and require about 1 hour in our department for each treatment. Brachytherapy involves an outpatient procedure in the OR with urology under general anesthesia. Acute toxicity could include urinary frequency, dysuria, urinary urgency, increased bowel movement frequency, rectal urgency, and fatigue. Late toxicity could arise months or even years after the completion of therapy and could include changes to urinary and bowel habits, which can be mild to moderate (5-20%) or severe (~2-5%). Severe toxicity may include hematuria, or hematochezia, which requires further workup and/or intervention to attempt to correct. Additionally there is a moderate risk for decline in sexual function after radiation therapy, which may occur gradually, and may or may not respond to sexual medicines or devices. He understands that there is a risk of severe and permanent damage to any irradiated tissue, although the risk of such damage is very low. There is a 0.5% risk of radiation-related secondary cancer over a 15-year period. Regarding the risks of radiation therapy, he had an opportunity to ask questions, all of which were answered to his satisfaction. \*\*\* (optional): A manuscript detailing quality of life after local therapy (Sanda et al. NEJM 2008) was given to him. \*\*\* Informed consent was obtained. \*\*\*If we proceed to radiation planning, we recommend placement of gold fiducial markers to assist with patient alignment during radiation treatment. We will schedule this on the same day of the CT simulation in our department.

\*\*\*(Optional: intermediate risk) We had an extensive discussion regarding the role for androgen deprivation therapy (ADT). We reviewed side effects including hot flashes, fatigue, breast tenderness, decreased libido, and potential effects on metabolism (inclusive of weight gain, effects on hypertension or diabetes, cholesterol control, and heart health) and bone health. It is unclear in this case whether benefits outweigh risks with regard to the addition of ADT. If he is treated with combined ADT and RT, dual agent ADT would precede RT by 2 months.

\*\*\*(Optional: high risk) We had an extensive discussion regarding the role for androgen deprivation therapy (ADT). We reviewed side effects including hot flashes, fatigue, breast tenderness, and decreased libido. For high risk prostate cancer treated with standard doses of external beam RT, ADT can help improve biochemical control and survival. ADT would precede RT by 2 months. For men with T3 disease, 2 years and 4 months of ADT could be considered standard.

If he begins ADT, we would recommend he begin Vitamin D 1000 IU/day and calcium 1200-1500 mg/day. If he has this therapy here, we will order a bone mineral density study.

4. After hearing the above, he felt most comfortable \*\*\*

5. [list other recs here]

\*\*\*(optional: active surveillance) As part of our standard recommendation for patients undergoing surveillance, we will order an endorectal MRI. This will help to evaluate for the presence of higher risk features that might have us lean more towards local therapy.

---

**PXM1**

oligometastatic prostate adenocarcinoma, cT\*\*\*N\*\*\*M\*\*\*, GS \*\*\*, \*\*\* cores, PSA \*\*\* with \*\*\*imaging evidence of metastatic disease at \*\*\*. He has been treated with \*\*\*. He is medically \*\*\* healthy.

1. We discussed the natural history of oligometastatic prostate cancer, which he seems to have on the basis of his records available to us today. We discussed the natural history of oligometastatic prostate cancer. If untreated, it is possible that it may progress to more widely disseminated metastasis and/or his cancer may develop progressive castrate resistance. We discussed treatment options, including radiation therapy to the prostate and/or to the metastatic sites (typically with hormonal therapy, known as ADT) or continuing ADT alone.

2. The primary goal of radiation therapy to the prostate is to potentially improve overall survival, prostate-cancer specific survival, and prevent further metastatic progression, based on extrapolation from a large Phase III randomized trial (STAMPEDE). The primary goal of radiation therapy to oligometastatic sites is to provide local control of the metastatic lesions (and improve progression free survival) and possibly decrease further metastatic spread, based on recent Phase II data (ORIOLE, STOMP trials). We expect a moderate to high likelihood of achieving this goal.

3. The logistics and possible side effects of radiation therapy were discussed with him. EBRT could go over a continuous

4 weeks, Monday through Friday, and require about 1 hour in our department for each treatment. Acute toxicity could include urinary frequency, dysuria, urinary urgency, increased bowel movement frequency, rectal urgency, and fatigue (for treatment to the prostate). Acute toxicity for RT to the metastatic sites would have \*\*\* toxicities. Late toxicity could arise months or even years after the completion of therapy and could include changes to urinary and bowel habits, which can be mild to moderate (5-20%) or severe (~2-5%). Severe toxicity may include hematuria, or hematochezia, which requires further workup and/or intervention to attempt to correct. Additionally there is a moderate risk for decline in sexual function after radiation therapy, which may occur gradually, and may or may not respond to sexual medicines or devices. Additional late toxicity for RT to the metastatic sites include the possibility of \*\*\*. He understands that there is a risk of severe and permanent damage to any irradiated tissue, although the risk of such damage is very low. There is a 0.5% risk of radiation-related secondary cancer over a 15-year period. Regarding the risks of radiation therapy, he had an opportunity to ask questions, all of which were answered to his satisfaction. If we proceed to radiation planning, we may recommend placement of gold fiducial markers to assist with patient alignment during radiation treatment. We will schedule this on the same day of the CT simulation in our department.

4. After hearing the above, he felt most comfortable \*\*\*

---

**PXNRGGU008**

We discussed the NRG GU008 trial, which is a phase 3 trial incorporating Abiraterone Acetate with Prednisone and Apalutamide and Advanced Imaging into Salvage Treatment for Patients with Node-Positive Prostate Cancer after Radical Prostatectomy. We discussed that the trial will compare the addition of abiraterone acetate, prednisone, and apalutamide to salvage radiotherapy combined with a gonadotropin-releasing hormone (RT+ GnRH) agonist with the RT + GnRH regimen alone to determine if either treatment improves metastasis-free survival (MFS). He was \*\*\* interested in enrollment, and was given information on the study.

---

**PXNRGGU009**

\*\*\*We discussed the NRG GU009 trial, which is a phase 3 risk adapted clinical trial for men with NCCN high risk prostate cancer. We discussed that the trial consists of Decipher risk score adapted treatment de-intensification or intensification using variations of combination hormonal therapy and EBRT. Men with a Decipher risk in the lower 2/3 of Decipher genomic risk (<0.85) can be treated with 12 months ADT plus RT instead of 24 months ADT+RT. Men in the upper 1/3 of Decipher genomic risk (>0.85) or have node-positive disease by conventional imaging (MRI or CT scan) will have treatment intensification with apalutamide and abiraterone acetate with prednisone added to the standard of RT plus 24 months ADT. He was \*\*\* interested in enrollment, and was given information on the study.

---

**PXORALADT**

Because of his age and health, as well as a desire to limit side effects of therapy, we had a discussion that a modification on usual LHRH agonist ADT could be considered. We suggested that he may receive oral-only ADT with RT such as bicalutamide and finasteride as a means to potentially reduce risks of ADT mostly related to the longer recovery time of testosterone needed with LHRH agonist therapy. However, this is not considered a standard option, and may also not provide the best chance for cure. He preferred this approach.

---

**PXPOSTOPPLAN**

adenocarcinoma of the prostate, preop PSA \*\*\*, s/p radical prostatectomy in \*\*\*, pT\*\*\*N\*\*\*, Gleason \*\*\*, \*\*\* surgical margin with detectable post-operative PSA, maximum \*\*\*.

1. We discussed the rationale for salvage radiation therapy. The rising PSA does not pose a threat to his immediate quality of life or life expectancy. Observational data suggest that untreated, continued PSA rises may result in distant metastases in 5-10 years, with risk of diminished life expectancy within a few years beyond that. The role of salvage radiation therapy would be to offer local control for disease that may exist in the prostate bed or pelvic lymph nodes. In men with limited to no medical comorbidity with a life expectancy longer than 5-10 years, this can translate to a reduction in distant metastasis and prostate cancer specific mortality. In consideration of his disease risk factors and relative health, he is at risk for prostate cancer mortality without treatment. Radiation therapy can reduce this low risk, at the expense of the risk of acute and late radiation toxicity. However, there is a chance that the PSA is coming from a regional or distant source such that the RT may not control the disease. Alternative treatment options include treatment only at symptomatic recurrence, or hormonal therapy alone. Hormonal therapy alone is less likely to result in a durable PSA control in comparison to salvage radiation.

2. The logistics and possible side effects of radiation therapy were discussed with him. Treatment would go over a

---

continuous 7-8 weeks, Monday through Friday, and require about 1 hour in our department for each treatment. Acute toxicity could include urinary frequency, dysuria, urinary urgency, increased bowel movement frequency, rectal urgency, and fatigue. Late toxicity could arise months or even years after the completion of therapy and could include changes to urinary and bowel habits, which can be mild to moderate (5-20%) or severe (~2-5%). Severe toxicity may include hematuria, or hematochezia, which requires further workup and/or intervention to attempt to correct. Additionally there is a moderate risk for decline in sexual function after radiation therapy, which may occur gradually, and may or may not respond to sexual medicines or devices. He understands that there is a risk of severe and permanent damage to any irradiated tissue, although the risk of such damage is very low. There is a 0.5% risk of radiation-related secondary cancer over a 15-year period. Regarding the risks of radiation therapy, he had an opportunity ask questions, all of which were answered to his satisfaction. \*\*\* (optional:) A handout of our quality of life outcomes (Akthar et al., Eur Urol 2019) was provided to him.

3. The option of possibly enhancing the effect of radiation therapy was discussed, including combined hormonal therapy (ADT). Potential side effects of hormonal therapy can include hot flashes, decreased libido, changes to blood pressure, weight, glucose control, and cholesterol, decreased bone mineral density, and potential changes in mood changes and energy level. With the combined treatment, his estimated chance for PSA control would likely be higher than with RT alone. We discussed the use of short\*\*\* term (4-6\*\*\* mo) hormonal therapy which includes bicalutamide once daily and lupron injections in the form of once monthly or every 3 month injections. Typically this therapy is started prior to the RT by 2 months. \*\*\*Not pursuing ADT is also reasonable given the uncertain balance of risks and benefits, including patient preference. In his case, we recommended \*\*\*. If he begins ADT, we would recommend he begin Vitamin D 1000 IU/day and calcium 1200-1500 mg/day, and having a baseline testosterone level and bone mineral density study checked.

4. Endorectal MRI, bone scan, PET scan \*\*\*

\*\*\* 5. Labs were ordered for today and are above.

#### PXPROSTATAK

We discussed the Prostatak trial, which is a fully blinded, randomized, placebo controlled phase 3 clinical trial testing a gene mediated cytotoxic immunotherapy (GMCI) approach in combination with EBRT. The GMCI approach uses a common cold virus that has been modified so that it cannot replicate and so that it delivers a genetic cargo from the Herpes virus (tk). When this modified virus (AdV-tk) infects tumors, the TK protein is manufactured inside the cells. Patients then receive an oral activating agent that triggers an immune response against the cancer. Results to date from phase 2 clinical studies in prostate cancer have been extremely promising. Patients are being randomized 2:1 (active vs. placebo) and stratified based on NCCN risk group and whether a patient chooses to take short term neoadjuvant androgen deprivation therapy. He was \*\*\* interested in enrollment, and was given information on the study.

#### PXSPACEOAR

We discussed the use of SpaceOAR in his case. We discussed that the number of men needed to have a SpaceOAR to benefit one patient would be around 20. As such, we discussed that we do not typically recommend a SpaceOAR unless patients are on a blood thinner or are diabetic. We discussed that in our own institutional outcomes, we found that strict radiation metrics can mitigate radiation toxicity. \*\*\*In his case, we did not feel that a SpaceOAR would be beneficial.

#### PXSPACEOARD

#### PROCEDURE NOTE: TRANSPERINEAL IMPLANTATION OF GOLD (FIDUCIAL) MARKERS AND PERI-RECTAL HYDROGEL PLACEMENT

Mr. @patient @years gentleman with adenocarcinoma of the prostate. He will undergo radiation therapy to treat this prostate cancer. He had taken a dulcolax OTC and antibiotics as well as instructed to limit his diet to a clear liquid diet prior to coming in for the procedure this morning. He was not taking any anticoagulants. Prior to the procedure, the patient was provided with topical emla cream and instructed to take an anxiolytic (diazepam 5 mg PO tablet) and percocet (1 tablet 5/325 mg) for pain control. The patient was placed in the dorsolithotomy position with knees flexed at 90 degrees.

The ultrasound probe (BK, transrectal probe serial #3127855, Model E14C14B) was attached to the stepper apparatus, which was secured to the table. The position of the prostate relative to the template grid was aligned for the procedure. The prostate gland measured 4.0 cm in craniocaudad dimension. The perineum was prepped with chlorahexidine solution. Next, using sterile gloves, approximately 10 cc of 2% lidocaine without epinephrine was used to anesthetize the perineum and along the planned fiducial/spaceOAR track inferior to the prostate bilaterally. Then, 3 separate 22G needles containing preloaded gold seeds (Gold Anchor, GA200-10-B, 1 cm x 0.4 mm) were inserted to place the markers in one

after the other using guidance of the template grid. Gold markers were implanted transperineally at the right anterior region (near or in the suspected PIRADS5 lesion), left mid-gland, and right apex. Next, we turned our attention to the spaceOAR Device. The device was prepped and assembled and 5 cc was confirmed in the dual syringe system with the hydrogel and accelerant again using a sterile technique. Two mL of air was withdrawn into the syringes to reduce the risk of reaction prior to placement as a buffer. Next, a separate needle was attached with a saline syringe, inserted into the perineum, and guided to the fat plane between the prostate and anterior rectal wall. Hydrodissection was performed with ~6 cc saline and constant monitoring of the needle on sagittal imaging, with confirmation subsequently on axial imaging. Saline was infused with minimal resistance. The syringe was slightly aspirated to confirm the needle was not in a vessel and the saline syringe was removed and the spaceOAR apparatus was attached after expelling air at the tip of the syringe. The hydrogel was infused into the peri-rectal space over ~10 seconds. The needle was then removed with minimal bleeding. The ultrasound probe imaging was reviewed in both the axial and sagittal dimensions and hydrogel placement appeared to be in the peri-rectal space and symmetric. The ultrasound probe and stepper were removed. The perineum was clear of any active bleeding or hematoma by the end of the procedure. He tolerated this well. There was minimal bleeding.

---

#### PXTPN

#### RADIATION ONCOLOGY TREATMENT PLANNING NOTE

@NAME@ came in for radiation treatment planning in preparation for radiation therapy, with a diagnosis of \*\*\*

**[choose from intact or postop prostate below; add bare essential details to carry over to a treatment summary; include other neoadjuvant therapy if relevant]**

adenocarcinoma of the prostate, PSA \*\*\*, Gleason \*\*\*+\*\*\*, with \*\*\* of \*\*\* biopsy cores involved, clinical T\*\*\*. He will be treated with radiation and \*\*\*short-term OR long-term OR no hormone therapy. His most recent injection was given\*\*\*.

adenocarcinoma of the prostate, PSA \*\*\*, status post radical prostatectomy in \*\*\*, pT\*\*\*N\*\*\*, Gleason score \*\*\*+\*\*\*, \*\*\*positive OR negative) surgical margins. He will be treated for a post-operative PSA with radiation and \*\*\*short-term OR long-term OR no hormonal therapy. His most recent injection was given \*\*\*.

@CAPHE@ {has/does not have:22195} prior history of RT and {has/does not have:22195} history of cardiac device.

Treatment position was defined in the CT simulator room. \*\*\*A 4D scan was evaluated to assess respiratory excursion; because of \*\*\*, it was decided to proceed with \*\*\*. Alpha cradles were made to immobilize the upper and lower body. Volumes of interest including the target area and normal tissues will be defined using CT planning. The following contrast was used to improve volume delineation: \*\*\*. Other modalities of imaging used for volume delineation included: \*\*\*.

Computerized dosimetry will be used to optimize dose to the tumor, and minimize dose to the normal tissues. Custom blocking (multileaf collimators) will be used. Planning target volumes were defined as: \*\*\*The prostate measured \*\*\*cc by CT.

**[choose from below]**

CTV=\*\*\*; PTV=\*\*\*. We anticipate treating the PTV to \*\*\* Gy.

PTV1 = prostate + seminal vesicles + \*\*\* mm. PTV2 = prostate + \*\*\* mm.

PTV1 = (modified pelvic vessels + 1.5 cm) + (prostate + \*\*\* cm). PTV2 = prostate + \*\*\* mm.

We anticipate treating PTV1 to \*\*\* Gy and PTV2 to \*\*\* Gy at \*\*\* Gy/fx.

**[insert appropriate PLD smartphrase here (PLDANAL, PLDBLADDER, PLDGASTRIC, PLDGENERAL, PLDHYP03, PLDPANCREAS, PLDX1, PLDX2, PLDPXHYPO, PLDPXHYPO2, PLDPXHYPO3, PLDPXSBRT, PLDRECTUM, PLDRECTUMSC) ]**

Intensity modulated radiation therapy (IMRT) will be used to optimally spare the adjacent critical structures including the \*\*\*structures above. In this case, critical structures are in close proximity to the target volume. The use of IMRT will lead to improved conformality in target coverage, enabling superior sparing of adjacent critical structures. Image guidance will be used (daily or weekly\*\*\*, setting up to \*\*\*). We anticipate starting therapy approximately in 1 week. Informed consent has been obtained.

---

#### PXVOLUMESTUDY

#### PROCEDURE NOTE: PROSTATE VOLUME STUDY FOR RADIOACTIVE SEED IMPLANT

Mr. @NAME@ is a @AGE@ gentleman with prostate cancer. He came in today for a volume study in preparation for prostate brachytherapy.

He took an enema prior to coming into the department. He was positioned in the Radiation Oncology Department in the dorsolithotomy position. Knees were flexed at and his feet were positioned in yellow-fin stirrups. Foot position was at \*\*\*. Hip flexion was at \*\* degrees. Knee angle was \*\* degrees. Ultrasound probe angle was \*\* degrees. A catheter was inserted under sterile conditions. The bladder was drained and 120 cc of saline was inserted into the bladder. The catheter was then tethered with mild traction to the anterior abdominal wall. Transrectal ultrasound (BK, probe serial # 3127855, Model E14C14B) was then introduced. The prostate was visualized. It measured \*\* cm in craniocaudad dimension. The urethra was visualized by injecting KY-Jelly slurry into the catheter. Pictures were taken at 5 mm step slices and recorded on a computer for planning purposes. The catheter was then removed. On \*\*\*, he will undergo permanent radioactive seed implant of the prostate gland.

---

#### RADONCINPTCONSULT

#### Radiation Oncology Inpatient Consultation

**Requesting Physician:** \*\*\*

**HPI:** \*\*\*

**Past medical history:**

\*\*\*

**Past surgical history:**

\*\*\*

**Prior radiation treatment:** \*\*\*

**Prior chemotherapy:** \*\*\*

**Current medications:**

@CMEDBRIEF@

**Allergies:** \*\*\*

**Family history:** \*\*\*

**Social history:** \*\*\*

**Physical examination:**

Vital signs: @VSP@

General: \*\*\*

HEENT: \*\*\*

Respiratory: \*\*\*

Cardiovascular: \*\*\*

Abdomen: \*\*\*

Neurologic: \*\*\*

Musculoskeletal: \*\*\*

Psych: \*\*\*

ECOG: \*\*\*

KPS: \*\*\*

**Diagnostic studies:** All diagnostic studies were personally reviewed by Dr. \*\*\*, attending physician.

**Laboratories:** \*\*\*

**Imaging:** \*\*\*

---

**Pathology:** \*\*\*

**Impression and Recommendations:** \*\*\*

\*\*\* was seen and examined with Dr. \*\*\*, attending physician. Over \*\*\* minutes was spent during the duration of this consultation, with greater than one half of the time spent counseling @HIM@.

Thank you very much for requesting a radiation oncology consultation for \*\*\*. It is a pleasure to participate in @HIS@ medical care, and \*\*\*.

\*\*\*, PGY-\*\*\*

Department of Radiation Oncology

Pager: \*\*\*

---

#### RECTALPREOPPLAN

is a @AGE@ old @SEX@ patient who presents with a rectal adenocarcinoma, uT\*\*\*N\*\*\*. He has a history of \*\*\*

We reviewed his history and discussed that the standard of care for locally advanced rectal cancer is neoadjuvant chemoradiation prior to surgery. The risk of local recurrence after surgery alone is probably around 15-20% but that the addition of radiation reduces this risk by about 50%. The concurrent chemotherapy, typically 5-FU based, acts as a radiosensitizer to improve the effect of the radiation. More recently data has supported a "total neoadjuvant" approach which includes moving the systemic chemotherapy prior to consideration of surgery. For his case, we discussed an approach of long course chemoRT (although short course 5 Gy x 5 is also an option) and systemic chemotherapy, with the order to be determined after multidisciplinary discussion. The advantage of long course chemoRT may be that the response rate could be better, especially when timed prior to the systemic chemotherapy. A downside to this approach compared to short course RT may be the delayed receipt of systemic chemotherapy. We also discussed the possibility of non-operative management if he has a complete clinical response. This is not necessarily considered a standard management option but has been explored in recent studies including one that we enrolled onto which followed patients with clinical complete response using sigmoidoscopy and MRI. The results of this program have yet to be published but roughly ~50% of patients enrolled had a complete clinical response after total neoadjuvant therapy.

The logistics of radiation were discussed including an initial simulation scan followed by daily radiation from Monday to Friday for a period of 5-6 weeks. Acute side effects include increased frequency or changes in bowel and bladder movements. Diarrhea can be treated with dietary modification or medications if necessary. There may be skin irritation and hair loss in the irradiated field, as well as fatigue that is cumulative. We did discuss that his current symptoms related to his cancer may actually improve as his tumor responds to treatment. There is a ~10% chance that he may require hospitalization during treatment, which would most likely be due to dehydration, failure to thrive, or pain control. Long-term side effects can occur months to years after treatment and can include changes to his bowel and bladder movements. There is a low percentage of patients (<5% of patients) who may develop serious, radiation-related side effects including small bowel obstruction or dysfunction of the bowel or bladder. As the femoral heads/sacrum will receive some dose, there is also a risk of insufficiency fracture. We also discussed that there may be a decline in sexual health due to the radiation, and the chance that the radiation or chemotherapy could induce infertility. \*\*\*He and his wife note that their family planning is complete. All questions were answered.

We will discuss his care with our multi-disciplinary team and if he starts with radiation, we will schedule a radiation planning study.

[list clinical trial options here]

\*\*\* Another option we discussed is enrollment on a randomized study investigating neoadjuvant FOLFOX without radiation (N1048). The idea behind this study is to give upfront aggressive chemotherapy to treat both local and systemic disease initially instead of only in the adjuvant setting. Those who respond well to chemotherapy (radiographically) would proceed to surgery alone, which would avoid the side effects of radiation. We did discuss that he does have local symptoms and it is uncertain how effective systemic therapy would be in relieving these (as opposed to local radiation therapy), but that he would eventually get surgery either way. We also discussed that the reason for this trial is that it is unknown if outcomes could be equivalent or better with this new regimen while sparing patients from another modality of treatment with associated toxicities.

---

**Table 1: Normal tissue critical structure dose constraints**

<b>Serial Organ</b>	<b>Volume</b>	<b>Dose (Gy)</b>	<b>Avoidance Endpoint</b>
Spinal Cord	<0.03 cc	28	Myelitis
	<0.35 cc	22	Myelitis
	<1.2 cc	15.6	Myelitis [66]
Ipsilateral Brachial Plexus	< 0.03 cc	32	Brachial Plexopathy (RTOG 0813)
	<3 cc	30	Brachial Plexopathy (RTOG 0813)
Cauda Equina	<0.03 cc	32	Neuritis (AAPM TG-101)
	<5 cc	30	Neuritis (AAPM TG-101)
Sacral Plexus	<0.03 cc	32	Neuropathy (AAPM TG-101)
	<5 cc	30	Neuropathy (AAPM TG-101)
Trachea and Ipsilateral Bronchus (Non-adjacent wall)	<0.03cc	40	Stenosis/Fistula
	<5cc	32	Stenosis/Fistula (RTOG 0813)
Esophagus* (Non-adjacent wall)	<0.03cc	35	Stenosis/Fistula [66]
	<5 cc	27.5	Stenosis/Fistula (RTOG 0813)
Heart/Pericardium	<0.03 cc	38	Pericarditis [66]
	<15 cc	32	Pericarditis (RTOG 0813)
Great vessels (Non-adjacent wall)	<0.03 cc	53	Aneurysm [66]
	<10 cc	47	Aneurysm (RTOG 0813)
Skin	< 0.03cc	38.5	Ulceration
	< 10cc	36.5	Ulceration

Stomach	< 0.5cc	35	Ulceration/Fistula
	< 5cc	26.5	Ulceration/Fistula
Duodenum*	< 0.5 cc	30	Ulceration (RTOG 1112)
	< 5 cc	18.3	Ulceration [67]
Jejunum/S ileum*	< 0.03 cc	32	Ulceration
	< 30cc	20	Enteritis/Obstruction
Bowel*	< 0.03 cc	40	Ulceration
	<20 cc	28.5	Colitis/Fistula
Rectum*	<0.03 cc	55	Ulceration
	<3.5 cc	50	Proctitis/Fistula
	<20 cc	32.5	Proctitis/Fistula
Bladder	< 0.03	38	Cystitis/Fistula
	<15 cc	20	Cystitis/Fistula
Ureter	<0.03 cc	45	Stenosis
Penile Bulb	<3 cc	30	Impotence [66]
Femoral head	<10 cc	30	Necrosis
Bile Duct	<0.03 cc	41	Stenosis
Renal hilum/Vascular Trunk	<15 cc	23	Malignant Hypertension
Rib	<0.03 cc	57	Pain or Fracture
	<5 cc	45	Pain or Fracture
Parallel Organ	Volume	Dose (Gy)	Avoidance Endpoint
Lung (total)	< 37% lung volume	13.5	Pneumonitis
	< 1500 cc	12.5	Basic Lung Function (RTOG 0813)
	< 1000 cc	13.5	Pneumonitis (RTOG 0813)
Ipsilateral Kidney	< 130 cc	14.5	Basic Renal Function
Total Kidney	< 200cc	18	Basic Renal Function
Liver	<700 cc	21	Liver Function [66]

\*Note: avoid circumferential irradiation.

---

**ROFN**  
**RADIATION ONCOLOGY FOLLOW-UP NOTE**

---

**SBRTNOTE**  
PROCEDURE NOTE: STEREOTACTIC BODY RADIATION THERAPY

---

@NAME@ underwent treatment today with stereotactic body radiation therapy. Fraction \*\*\* of \*\*\* was delivered for a current dose of \*\*\* Gy. Accurate treatment position was verified with orthogonal kV images, and cone beam CT and triggered KV\*\*\*. Treatment was tolerated without any problems. The attending physician was present for the procedure.

---

**SLFOLLOWUP**

**THIS IS A PENDED NOTE; PATIENT WILL NOT BE SEEN UNTIL \*\*\***

**Radiation Oncology Followup**

**Diagnosis:** \*\*\*.

**Interval Since Completion of Radiation Therapy:** ~\*\*\* since completion of RT in \*\*\*.

**Region Treated:** \*\*\*

**Patient Status:** \*\*\*Doing well OR clinically stable\*\*\*

**Tumor Status/Treated Volume:** \*\*\*No evidence of active disease

**History:** @MRS@ @LNAME@ returns today for routine followup. @HE@ was last seen here in \*\*\*. Since that time @HE@ has had no new problems.\*\*\*

In clinic today, @MRS@ @LNAME@ \*\*\*.

@HE@ reports nocturia x\*\*\*. @HE@ has no incontinence, dysuria, or hematuria. @HIS@ bowel movements are normal with no blood in the stool or diarrhea. @HE@ has \*\*\* bowel movements per day. The last known colonoscopy occurred: \*\*\* with recommended follow-up in \*\*\* years. @HE@ is \*\*\* sexually active.

@HE@ denies any new major medical symptoms otherwise, including pain. @HE@ follows up regularly with his primary care physician, Dr \*\*\*.

**Interval medical/surgical history changes:** \*\*\*

@CMEDBRIEF@

**@PHYSICALEXAM@**

@V@ Cranial nerves 2-12 are grossly intact. Speech is fluent and coherent, and cognition is normal. Mood and affect are appropriate. Gait and station are unremarkable. Respiratory effort is normal.

**X-Rays and Laboratory Studies:** \*\*\* was drawn today

Last recorded CBC and CMP:

@LASTLABBRIEF(WBC,RBC,HGB,HCT,M  
CV,MCH,MCHC,RDW,PLT,MPV,PGRA)@

@LASTLABBRIEF(GLUC,NA,K,CHLORIDE,CO2  
,IGAP,BUN,CREAT,GFR,CALCIUM,GFR,BILTO  
NAL,TOTPROT,ALB,ALKPHOS,AST,ALT)@

**Impression and Recommendations:** @HE@ is doing well. Imaging revealed no evidence of clinical disease\*\*\*. We will see @HIM@ again in \*\*\* months. @HE@ has follow up appointments with the following providers: \*\*\*. @HE@ is scheduled for the following imaging: \*\*\*.

@HIS@ toxicity grades over the last interval of follow-up are grade \*\*\* for GI, grade \*\*\* for GU, and grade \*\*\* for sexual dysfunction.

\*\*\*include if appropriate.\*\*\*Consent has been provided to participate in our long-term outcomes study including database registry.

---

**SLFUN2**

**THIS IS A PENDED NOTE; PATIENT WILL NOT BE SEEN UNTIL @ENCDATE@**

**Radiation Oncology Followup**

**Diagnosis:** \*\*\*COPY FROM BEFORE.

**Interval Since Completion of Radiation Therapy:** ~1 month\*\*\* since completion of RT in @LASTENCTHISPROVIDER@

**Region Treated:** {RT region treated:5588}

**Patient Status:** {SL-FU-PTSTATUS:5589}

**Tumor Status/Treated Volume:** No evidence of active disease

**History:** @MRS@ @LNAME@ returns today for routine followup. @CAPHE@ was last seen here in @LASTENCTHISPROVIDER@. Since that time @HE@ has had no new problems.\*\*\*

In clinic today, @MRS@ @LNAME@ \*\*\*.

@CAPHIS@ IPSS score is {Numbers 1-35 (IPSS):5593}/35 (was {Numbers 1-35 (IPSS):5593}/35 prior to therapy) and reports nocturia {NUMBERS; 0-10:334::"0"} (was {NUMBERS; 0-10:334::"0"} prior to therapy). @CAPHE@ has \*\*\*no incontinence, dysuria, or hematuria. @CAPHIS@ bowel movements are normal with \*\*\*no blood in the stool or diarrhea. @CAPHE@ has {NUMBERS; 0-10:334::"0"} bowel movements per day (was previously {NUMBERS; 0-10:334::"0"}). {DR-CSCOPE-HX:5594}. @CAPHE@ {IS/IS NOT (IS NOT DEFAULT):220111} sexually active. He rates the strength of his erections as {NUMBERS; 0-10:337}/10 (was {NUMBERS; 0-10:337} prior to treatment) and has a SHIM score of {Numbers 1-25:5592}/25 (was {Numbers 1-25:5592}/25) prior to treatment.

@CAPHE@ denies any new major medical symptoms otherwise, including pain. @CAPHE@ follows up regularly with his primary care physician, Dr @PCP@.

**Interval medical/surgical history changes:** \*\*\*

@CMEDBRIEF@

**@PHYSICALEXAM@**

@V@ Cranial nerves 2-12 are grossly intact. Speech is fluent and coherent, and cognition is normal. Mood and affect are appropriate. Gait and station are unremarkable. Respiratory effort is normal.

**X-Rays and Laboratory Studies:** Labs {SL-UROLABS:5590:s} {was/was no:22191} drawn today and will be communicated with him via MyChart as was his preference.

Last recorded CBC and CMP:

@LASTLABBRIEF(WBC,RBC,HGB,HCT,M CV,MCH,MCHC,RDW,PLT,MPV,PGRA)@	@LASTLABBRIEF(GLUC,NA,K,CHLORIDE,CO2 ,IGAP,BUN,CREAT,GFR,CALCIUM,GFR,BILTO TAL,TOTPROT,ALB,ALKPHOS,AST,ALT)@
--	--

**Impression and Recommendations:** @CAPHE@ is doing well. Imaging revealed no evidence of clinical disease\*\*\*. We will see @HIM@ again in \*\*\* months on @NEXTENCTHISDEPT@. @CAPHE@ also has appointments with the following providers: \*\*\*Dr. {Providers:22819}. @CAPHE@ is scheduled for the following imaging: \*\*\*None.

\*\*\*DELETEME: @FOLLOWUPAPPOINTMENTS@

@CAPHIS@ toxicity grades over the last interval of follow-up are grade GI: {SL-CTCAE:5571} GU: {SL-CTCAE:5571} Sexual dysfunction: {SL-CTCAE:5571}. {Patient is consented to our long term database study.:5586}

**David M. Rosenberg, MD, PGY2**

Department of Radiation and Cellular Oncology  
Extension 22873  
Pager 90234

SLOTV

## **Radiation Therapy Management Record**

**DIAGNOSIS:** @DIAGX@

**TREATMENT SITE:** \*\*\*

**TOTAL ORDERED DOSE:** \*\*\* Gy

**DOSE RECEIVED TO DATE:** \*\*\* Gy

**FRACTION NUMBER:** \*\*\* of \*\*\* (RT start date: \*\*\*)

**SUBJECTIVE:** \*\*\*. \*\*\* BM/day, no diarrhea.

@CMEDBRIEF@

**OBJECTIVE/LABS:** @V@ Appears well.

@LABCBC@

@LABCMP@

BMD was done \*\*\* and showed:

\*\*\*/\*\*\*/20: SARS-CoV2 RNA nasal swab - negative

**PLAN:** Continue treatment as planned. \*\*\*

Missed days of treatment not including holidays thus far: 0 \*\*\*

Acute toxicity (RTOG): Skin NA; Nausea NA; Vomiting NA; Large bowel \*\*\*; Bladder \*\*\*.

SLREFERRAL

Please see the note below on our mutual patient.

SLRTSUMMARYBOX

**TREATMENT SITE:** \*\*\*

**TOTAL ORDERED DOSE:** \*\*\* Gy

**DOSE RECEIVED TO DATE:** \*\*\* Gy

**FRACTION NUMBER:** \*\*\* of \*\*\*

SLSUMMARY

## **RADIATION ONCOLOGY COMPLETION SUMMARY**

**PATIENT:** @NAME@

**Requesting Physician:** Dr. \*\*\*, Department of \*\*\*

**PCP:** \*\*\*

**Attending Physician:** Dr. Stanley Liauw

**Resident Physician:** Dr. \*\*\*

**Diagnosis:**

Adenocarcinoma of the prostate, PSA \*\*\*, Gleason \*\*\*+\*\*\*, with \*\*\* of \*\*\* biopsy cores involved, clinical T\*\*\*.

Adenocarcinoma of the prostate, PSA \*\*\*, status post radical prostatectomy in \*\*\*, pT\*\*\*N\*\*\*, Gleason score \*\*\*+\*\*\*, (positive OR negative) surgical margins. Treated for post-operative PSA of \*\*\*.

**History summary:** @NAME@ is a @AGE@ old with a history of \*\*\* adenocarcinoma of the \*\*\* prostate. We saw @HIM@ in consultation and recommended radiation therapy \*\*\* (with or without hormonal therapy or \*\*\*chemotherapy). @HE@ was in agreement with this treatment plan.

## SUMMARY OF RADIATION THERAPY

Region Treated	Radiation Energy	Min. Tumor Dose (Gy)	Date From	Date To
----------------	------------------	----------------------	-----------	---------

**Total cumulative dose:** \*\*\* Gy in \*\*\* Gy fractions

**Representative isodose lines:**

Axial picture here	Coronal or sagittal picture here
--------------------	----------------------------------

**Treatment Summary:** Signed informed consent was obtained prior to the start of treatment. Treatment positioning, and target volumes and organs at risk were delineated as described in his radiation treatment planning note. @HE@ was treated with \*\*\*an IMRT (a 3D conformal RT) plan to doses above. @HE@ received treatment once daily, Monday through Friday, to a cumulative dose of \*\*\* Gy. Daily (\*\*or weekly) orthogonal KV imaging (and \*\*\*add anything else) \*\*\*was/were used during treatment to ensure accurate patient set-up. @HE@ also received concurrent \*\*\* over the course of therapy; his last hormonal therapy was given in \*\*\* (1\*\*\* month injection) for a total of \*\*\* months given to date.

Overall, @NAME@ tolerated radiation treatment well. There were no treatment related breaks. [if so, indicate nature of the break.] Toxicities included Skin \*\*\*; Large bowel \*\*\*; Bladder \*\*\*. [briefly describe the nature of the side effects.] @HE@ required \*\*\*no medications to manage these side effects. Labs were monitored and remained stable throughout treatment.

**Follow-up Instructions:** @NAME@ was given a follow-up appointment for \*\*\*. [list follow-up with other doctors at UCMC if appropriate.] Appropriate skin care instructions were given. @HE@ was instructed to notify us with any significant changes in function or performance status, or with any future questions or concerns.

\*\*\*, MD

---

## SLTABLE

--	--

---

## TBIPLAN

who presents with \*\*\* [include the most essential elements of the case only that impact risk stratification/prognosis, and affect radiation decision making]

1. We discussed the natural history of \*\*\* cancer. If untreated, it is possible that \*\*\*. We discussed treatment options including radiation therapy, \*\*\*.
2. The primary goal of radiation therapy in this setting is \*\*\*. We expect a \*\*\* (low, medium, or high; you can also include a % range estimate) likelihood of achieving this goal.  
[discuss the choices and which might be best suited for this case, including clinical trial options; include difficulties which may exist in making this recommendation; convey how the patient was counseled]
3. The logistics and possible side effects of radiation therapy were discussed. Treatment would go over a continuous \*\*\*

weeks, Monday through Friday, and require about 1 hour in our department for each treatment. Acute toxicity could include nausea/vomiting, gastrointestinal distress including cramping or pain within a few days of therapy, parotitis with xerostomia, cytopenia, and alopecia (which is usually reversible, but changes in hair color or texture are common). Late toxicity could arise months or even years after the completion of therapy and could include changes to the lung, liver, kidney, eye, central nervous system including brain, gonadal function, and thyroid function, which can be mild to moderate or severe. Severe toxicity may include interstitial pneumonitis (10-20%), veno-occlusive disease of the liver with severe liver dysfunction (including a syndrome of hepatomegaly, jaundice, ascites in 5-10%), kidney dysfunction (including anemia, hematuria, and rising creatinine), cataract formation which could require bilateral cataract excision, infertility, and secondary malignancy. @HE@ understands that there is a risk of severe and permanent damage to any irradiated tissue, although the risk of such damage is low. Regarding the risks of radiation therapy, @HE@ had an opportunity ask questions, all of which were answered to @HIS@ satisfaction.

4. After hearing the above, @HE@ felt most comfortable \*\*\*

5. [list other recs here; if there are updated labs please include; cc relevant MDs]

---

TEST2  
@RDONRR@

---

TPN  
**RADIATION ONCOLOGY TREATMENT PLANNING NOTE**

@NAME@ came in for radiation treatment planning in preparation for radiation therapy, with a diagnosis of \*\*\*

**[choose from intact or postop prostate below; add bare essential details to carry over to a treatment summary; include other neoadjuvant therapy if relevant]**

adenocarcinoma of the prostate, PSA \*\*\*, Gleason \*\*\*+\*\*\*, with \*\*\* of \*\*\* biopsy cores involved, clinical T\*\*\*. He will be treated with radiation and \*\*\*short-term OR long-term OR no hormone therapy. His most recent injection was given\*\*\*.

adenocarcinoma of the prostate, PSA \*\*\*, status post radical prostatectomy in \*\*\*, pT\*\*\*N\*\*\*, Gleason score \*\*\*+\*\*\*, \*\*\*positive OR negative) surgical margins. He will be treated for a post-operative PSA with radiation and \*\*\*short-term OR long-term OR no hormonal therapy. His most recent injection was given \*\*\*.

He has no \*\*\* prior history of RT and no \*\*\* history of cardiac device.

Treatment position was defined in the CT simulator room. \*\*\*A 4D scan was evaluated to assess respiratory excursion; because of \*\*\*, it was decided to proceed with \*\*\*. Alpha cradles were made to immobilize the upper and lower body. Volumes of interest including the target area and normal tissues will be defined using CT planning. The following contrast was used to improve volume delineation: \*\*\*. Other modalities of imaging used for volume delineation included: \*\*\*.

Computerized dosimetry will be used to optimize dose to the tumor, and minimize dose to the normal tissues. Custom blocking (multileaf collimators) will be used. Planning target volumes were defined as: \*\*\*The prostate measured \*\*\*cc by CT.

**[choose from below]**

CTV=\*\*\*; PTV=\*\*\*. We anticipate treating the PTV to \*\*\* Gy.

PTV1 = prostate + seminal vesicles + \*\*\* mm. PTV2 = prostate + \*\*\* mm.

PTV1 = (modified pelvic vessels + 1.5 cm) + (prostate + \*\*\* cm). PTV2 = prostate + \*\*\* mm.

We anticipate treating PTV1 to \*\*\* Gy and PTV2 to \*\*\* Gy at \*\*\* Gy/fx.

**[insert appropriate PLD smartphrase here]**

Intensity modulated radiation therapy (IMRT) will be used to optimally spare the adjacent critical structures including the \*\*\*structures above. In this case, critical structures are in close proximity to the target volume. The use of IMRT will lead to improved conformality in target coverage, enabling superior sparing of adjacent critical structures. Image guidance will be used (daily or weekly\*\*\*, setting up to \*\*\*). We anticipate starting therapy approximately in 1 week. Informed consent has

been obtained.

---

VV

**VIRTUAL VISIT NOTE - ROUTINE CARE**

This was an audio \*\*\*and video telecommunication in lieu of an in-person visit due to the coronavirus emergency. \*\*\*The patient gave verbal consent to have this encounter using \*\*\*zoom video. \*\*\*The patient declined video but gave verbal consent to have this encounter using the telephone.

---