March 23rd 2017

Dear Dr. [redacted]

Thank you for reaching out to Tata Memorial Centre (TMC) and nationally acclaimed experts of the National Cancer Grid (NCG). Navya is pleased to offer this online expert consultation service for assessing your treatment options.

We converted your case reports into a structured summary to be reviewed by a surgical oncologist, a medical oncologist, and a radiation oncologist in the Uro oncology Disease Management Group at Tata Memorial Centre. We asked the following question(s) on your behalf:

1. Is surgery recommended at this time?
2. What is recommended at this time: continuing the ongoing Androgen Deprivation Therapy (ADT) with Bicalutamide 50 mg daily or chemotherapy?
3. Is radiation therapy to the L4 lesion (asymptomatic) recommended at this time, with chemotherapy, or at a later time?
4. Is treatment with Bisphosphonates recommended at this time?

The TMC NCG Navya opinion is summarized as follows:

1. Given asymptomatic, and no prior systemic treatment, radiation therapy to L4 lesion is not recommended at this time.
2. Continuing the ongoing Androgen Deprivation Therapy (ADT) with Bicalutamide 50 mg daily until disease progression or dose limiting toxicity is recommended at this time.
3. Chemotherapy with Docetaxel for six cycles is also recommended at this time.
4. After completing six cycles of the recommended chemotherapy with Docetaxel (as mentioned above), assessment of response (i.e. whether the tumor(s)/lesion(s) in the body have decreased/not increased/increased) with PSMA PET CT scan is recommended.
5. Further, if the response assessment with PSMA PET CT (as mentioned above), has similar findings to the PSMA PET CT done in March 2017, then definitive therapy (i.e. the intent of treatment being curative) can be considered. Please note that definitive therapy, is currently experimental, but in retrospective series has improved survival outcomes. Given the young age of 61 years, if desires to consider definitive treatment (as mentioned above), and after a thorough discussion with the treating oncologist, definitive therapy to the prostate, nodes and the bone is recommended.
6. Please note that one method of delivering definitive local therapy is through radiation to the prostate, pelvic nodes, and the solitary bone site.
7. Alternately, surgery (radical prostatectomy with pelvic lymph node dissection) may be considered after completion of neoadjuvant chemo hormonal therapy.

However initiating with same (i.e. surgery), is experimental and under study. The decision for surgery should be in consult with the treating oncologist.

8. If surgery is considered for definitive therapy, diagnostic test with MRI scan of the pelvis is recommended at that time.

We hope that the expert opinion is helpful in determining the course of your treatment.

Please discuss this opinion with your treating oncologist(s).

You may reach out to You may reach out to us for an expert opinion from Tata Memorial Centre and the National Cancer Grid, for further treatment plan with the response assessment.

Navya is pleased to provide the following information on treatment recommendation(s) per the National Comprehensive Cancer Network (NCCN), which lists the globally accepted guidelines for the treatment of cancers, and the Navya Experience Engine based on collective experience of experts at Tata Memorial Center and the National Cancer Grid.

Docetaxel 75 mg/m2 every three weeks for six cycles is recommended.

Please do not hesitate to write to us or call us with any questions.

Sincerely,

Gitika Srivastava

CASE SUMMARY Navya ID [redacted] **Expert Opinion ID** [redacted]

Current Diagnosis: Metastatic Prostate Cancer

Age: 61 Years Old

Gender: Male

Past Medical History: High Cholesterol

Past Medical History: Obesity

Past Medical History: Diabetes - DM Type 2

Complaint(s): Incomplete voiding of urine. LUTS [November- December 2016]

PSA: 95.8 [March 3rd 2017]

PSMA PET- CT: Mildly enlarged prostate; PSMA avid Rt prostate lobe lesion involving both peripheral zones, central gland & Lt lobe of midgland peripheral zone; Rt seminal vesicle infiltration; PSMA avid subcm B/L internal iliac LNs; PSMA avid small sclerotic L4 vertebral lesion [March 3rd 2017]

DICOM Link: Click here

Met: Bone: Yes

Prior Surgery #1:

Timing	Surgery	Surgery Date
Primary	TRUS Guided Biopsy [Frozen Section] + Bilateral Orchidectomy	March 7th 2017

Prior Hormone Therapy #1:

Timing	Hormone Therapy	Treatment Start Date	Treatment End Date
Palliative/ Metastatic	Bicalutamide(50)qd	March 4th 2017	Ongoing

Diagnosis Made by: TRUS Guided Biopsy- Prostate [March 7th 2017]

Malignant Disease: Adenocarcinoma

Gleason's Score: 9 (4+ 5)-(Left Lobe)

Gleason's Score: 7 (4+3)- (Right Lobe)

Peri Neural Invasion: Positive

Clinical TNM Stage: Stage IV- anyT anyN M1

Note: Patient is planned for CT with Taxotere once in 3 weeks #6 with wysolone

General Condition: Patient is able to perform all self care activities, asymptomatic from the L4 bony lesion. Patient is a dermatologist and has specific questions regarding CT, ADT, Sequencing of CT with RT and Cytoreductive prostatectomy

Functional Status- ECOG Score: 0-1

Navya is a Cambridge, MA based company with offices in Bangalore, India. Navya is founded by graduates of Harvard University, MIT Sloan School of Management, and the Stanford School of Medicine. Navya's innovative and scalable decision making system is a technology powered solution for complex medical questions. Navya's software solutions are efficient engines to gather and synthesize individual goals of care, evidence specific to an individual medical case, and expert opinion, for evaluating treatment alternatives. Navya's goal is to assist in bringing clarity to the complexity of evaluating treatment alternatives. Navya's system collects the best available information and expertise from several worldwide sources relevant to a specific previously diagnosed medical case and assesses treatment decisions. For more information, please visit www.navya.info or call +91 7022009550 or email gitika@navya.care

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