

Supplemental Material:

Appendix 1 – Survey on Neoadjuvant Chemotherapy Use in Bladder Cancer (Medical Oncologist version)

1. What proportion of your practice is dedicated to the management of genitourinary cancers?

- ☐ <10% of all referrals ☐ 10% to 25% of all referrals ☐ 25% to 50% of all referrals ☐ >50% of all referrals

2. Where does the majority of your clinical practice occur?

- ☐ Non-Academic Setting ☐ Academic Setting

3. How long have you been practicing as a medical oncologist?

- ☐ <5 Years ☐ 5 -9 Years ☐ >10 Years

4. Do you practice on a full-time or part-time basis?

- ☐ Full time- Greater than thirty hours per week ☐ Part time- Less than thirty hours per week

5. What proportion of your time do you spend in clinical practice (versus other activities, such as research, education or administration)?

- ☐ <25% ☐ 25-50% ☐ 50-75% ☐ >75%

2-1 Overall Bladder Cancer Referral Information

6. What is the estimated number of patients referred to your practice with **bladder cancer** annually? For example, how many patients were you referred in 2009?

☐ <5 ☐ 5-10 ☐ 11 -15 ☐ 16 - 20 ☐ >20

7. Of all of the patients referred to your practice with **bladder cancer**, what do you estimate to be the relative contribution of each listed age group?

	<25%	25-50%	50-75%	>75%
<50 Years	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
50-65 Years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
65- 85 Years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
>85 Years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Ie. If you estimate less than 25% of all patients referred to your service with bladder cancer are under the age of 50, place an X in the box under the column marked <25% within the row marked <50 years of age.

2-2 Overall Bladder Cancer Referral Information

8. Of all patients referred to your practice with bladder cancer, what do you estimate to be the relative contribution of each category of performance status?

	<25%	25-50%	50-75%	>75%
ECOG 0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ECOG 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ECOG 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ECOG 3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ECOG 4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Ie. If you estimate less than 25% of all patients referred to your service with bladder cancer are ECOG 4, place an X in the box under the column marked <25%, within the row marked ECOG 4.

9. Of all patients referred to your practice with bladder cancer, what do you estimate to be the relative contribution of each listed medical subspecialty as the source of referral?

	<25%	25-50%	50-75%	>75%
Urologist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Radiation Oncologist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Family Physician	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (please specify):	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Ie. If you estimate family physicians represent 20% of all the referrals you receive for management of bladder cancer, place an X in the box under the column less than 25%, within the row marked Family Physician.

3-1 Neoadjuvant Chemotherapy- Referral Information

10. What do you estimate to be the annual number of patients with bladder cancer referred to your practice for consideration of neoadjuvant chemotherapy? For example, how many patients were you referred in 2009?

- ☐ 0 ☐ 1-2 ☐ 3-4 ☐ 5-6 ☐ >6
Please
specify:

11. Of all patients referred to your practice for consideration of neoadjuvant chemotherapy, what do you estimate to be the relative contribution of each listed age group?

	<25%	25-50%	50-75%	>75%
<50 Years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
50-65 Years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
65- 85 Years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
>85 Years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3-2 Neoadjuvant Chemotherapy- Referral Information

12. Of all patients with bladder cancer referred to your practice for consideration of neoadjuvant therapy, what do you estimate to be the relative contribution of each category of performance status?

	<25%	25-50%	50-75%	>75%
ECOG 0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ECOG 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ECOG 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ECOG 3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ECOG 4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

13. Of all patients with bladder cancer referred for consideration of neoadjuvant therapy, what do you estimate to be the relative contribution of each listed medical subspecialty as the source of referral of patients?

	<25%	25-50%	50-75%	>75%
Urologist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Radiation Oncologist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Family Physician	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (please specify):	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3-3 Neoadjuvant Chemotherapy- Referral Information

14. Of all patients with bladder cancer referred for consideration of neoadjuvant therapy, what do you estimate to be the relative contribution of each listed T -stage of bladder cancer?

	Never	<25%	25- 50%	50- 75%	>75%
T2a Invades superficial muscle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
T2b Invades deep muscle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
T3a Microscopic invasion of perivesical tissue	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
T3b Macroscopic invasion of perivesical tissue	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
T4 Tumour invades adjacent organ- prostate, uterus, pelvic/abdominal wall	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

15. Of all patients with bladder cancer referred for consideration of neoadjuvant therapy, what do you estimate to be the relative contribution of each listed nodal status of bladder cancer?

	Never	<25%	25-50%	50-75%	>75%
N1 One positive LN <2cm in diameter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
N2 One positive LN 2-5cm in diameter, or multiple positive LN	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
N3 One or more positive LN >5cm in diameter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3-4 Neoadjuvant Chemotherapy- General Staging/ Goals of Care

16. Do you offer neoadjuvant chemotherapy to patients with bladder cancer?

☐ Yes

☐ No

Please skip to next section.

17. Of all of the patients you offer neoadjuvant chemotherapy to, what do you estimate to be the relative contribution of each category of goal of treatment?

	Never	<25%	25-50%	50-75%	>75%
Downsize/ Convert to a surgical candidate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Attempt Bladder Preservation ^a	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Standard of Care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (please Specify):	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

^aRefers to the use of neoadjuvant chemotherapy alone as a bladder preservation strategy, if used concurrently with radiation please see concurrent therapy section.

3-5 Neoadjuvant Chemotherapy- Factors influencing recommendations

Questions 18-23 refer to the following clinical vignette.

You are referred an 80 year old male with muscle invasive transitional cell carcinoma, diagnosed by cystoscopy, seen on CT abdomen to be invading into the pelvic wall (stage 4Ba). His creatinine is 120, and he is ECOG 2. His past medical history is insignificant. You are referred by his Urologist for consideration of neoadjuvant therapy.

18. Which of the following staging modalities do you offer routinely/require in order to make a decision regarding neoadjuvant chemotherapy.

Check all that apply, please include those studies already performed if you would have offered them as routine in your practice.

- | | | | |
|---|--|---|---------------------------------------|
| <input type="checkbox"/> CT Chest | <input type="checkbox"/> CT Abdomen & Pelvis | <input type="checkbox"/> Bone Scan | <input type="checkbox"/> Cystoscopy |
| <input type="checkbox"/> CXR | <input type="checkbox"/> US Abdomen & Pelvis | <input type="checkbox"/> MRI Abdomen & Pelvis | <input type="checkbox"/> CT/ MRI Head |
| <input type="checkbox"/> Urine Cytology | <input type="checkbox"/> Other (please specify): | | |

19. What factors would contribute to your decision to NOT offer neoadjuvant chemotherapy? Please rank in order of importance, from greatest importance (1) to least important (5).

Stage

Functional Status

Age

Creatinine

Co-morbid Illness

Other (please specify):

20. With regards to the above factors, at what stage, functional status, age etc. would you not recommend neoadjuvant chemotherapy? Please feel free to include written comments.

a) At what functional status level would you NOT recommend neoadjuvant chemotherapy. Check ALL that apply.

<input type="checkbox"/> Functional Status is NOT a factor	<input type="checkbox"/> ECOG 1	<input type="checkbox"/> ECOG 2	<input type="checkbox"/> ECOG 3	<input type="checkbox"/> ECOG 4
<input type="checkbox"/> Other (please specify):				

b) At what T stage would you NOT recommend neoadjuvant chemotherapy? Check ALL that apply.

<input type="checkbox"/> T Stage NOT a factor	<input type="checkbox"/> T2a Invades superficial muscle	<input type="checkbox"/> T2b Invades deep muscle	<input type="checkbox"/> T3a Microscopic invasion of perivesical tissue	<input type="checkbox"/> T3b Macroscopic invasion of perivesical tissue	<input type="checkbox"/> T4a Tumour invades adjacent organ-prostate, uterus, pelvic/abdominal wall
<input type="checkbox"/> Other (please specify):					

c) At what nodal status would you NOT recommend neoadjuvant chemotherapy, if any?

<input type="checkbox"/> Nodal Status is NOT a factor	<input type="checkbox"/> N1 One positive LN <2cm in diameter	<input type="checkbox"/> N2 One positive LN 2-5cm in diameter, or multiple positive LN	<input type="checkbox"/> N3 One or more positive LN >5cm in diameter
<input type="checkbox"/> Other (please specify):			

d) At what age would you NOT recommend neoadjuvant chemotherapy? Check ALL that apply.

<input type="checkbox"/> Age is NOT a factor	<input type="checkbox"/> <70 years	<input type="checkbox"/> 70-75 years	<input type="checkbox"/> 75-80 years	<input type="checkbox"/> 80-85 years
<input type="checkbox"/> >85 Years	<input type="checkbox"/> Other (please specify):			

e) At what GFR value would you NOT recommend neoadjuvant chemotherapy? Check ALL that apply.

<input type="checkbox"/> Renal function is NOT a factor	<input type="checkbox"/> <20 ml/min	<input type="checkbox"/> 20-40 ml/min	<input type="checkbox"/> 40-60 ml/min	<input type="checkbox"/> >60 ml/min
<input type="checkbox"/> Other (please specify):				

Question 20(f) refers to the following clinical vignette. (Repeated from above)

You are referred an 80 year old male with muscle invasive transitional cell carcinoma, diagnosed by cystoscopy, seen on CT abdomen to be invading into the pelvic wall (stage 4Ba). His creatinine is 120, and he is ECOG 2-3. His past medical history is insignificant. He was referred by his Urologist, who felt he was a poor surgical candidate due to the extent of tumor invasion and his poor functional status.

f) Would you offer neoadjuvant chemotherapy to the patient presented in this clinical vignette, why/why not?

g) Any additional comments on factors that would lead you to recommend palliation versus neoadjuvant chemotherapy in a patient with bladder cancer deemed not a surgical candidate?

h) Any comments on factors that would lead you to recommend neoadjuvant chemotherapy in a patient with bladder cancer who is deemed a surgical candidate?

3-6 Neoadjuvant Chemotherapy- Regimen

21. What is the neoadjuvant chemotherapy regimen you would use in your practice? Please specify dosage, schedule and number of cycles used.

- | | |
|---|---|
| <input type="checkbox"/> Gemcitabine/ Cisplatin
Day 1, 8 of 21 day cycle
Gemcitabine Dose:
Cisplatin Dose:
Number of Cycles: | <input type="checkbox"/> Gemcitabine/ Cisplatin
Day 1, 8, 15 of 28 day cycle
Gemcitabine Dose:
Cisplatin Dose:
Number of Cycles: |
| <input type="checkbox"/> Gemcitabine/ Carboplatin
Schedule:
Gemcitabine Dose:
Other (include dose):
Number of Cycles: | <input type="checkbox"/> Gemcitabine single agent
Schedule:
Agent 1 (include dose):
Agent 2 (include dose):
Number of Cycles: |
| <input type="checkbox"/> MVAC
Schedule:
Methotrexate Dose:
Vinblastine Dose:
Adriamycin Dose:
Cisplatin Dose:
Number of Cycles: | <input type="checkbox"/> High Dose MVAC
Schedule:
Methotrexate Dose:
Vinblastine Dose:
Adriamycin Dose:
Cisplatin Dose:
Number of Cycles: |
| <input type="checkbox"/> Other (please specify): | |

22. What adjustments would you make if the patient had renal insufficiency?

What do you use as your cut-off GFR/Creatinine?

23. Please indicate clinical/pathological features you consider higher risk, and the regimen you would use in these patients.

3-7 Neoadjuvant Chemotherapy- Staging and Follow-up

24. Do you offer restaging as standard of care in your practice?

☐ Yes

☐ No

Please skip questions 25, 26

25. Which of the following midway staging modalities do you offer a patient during neoadjuvant chemotherapy, in order to assess response to treatment? Check all that apply.

☐ CT Chest

☐ CT Abdomen
& Pelvis

☐ Bone Scan

☐ Cystoscopy

☐ CXR

☐ US Abdomen
& Pelvis

☐ MRI Abdomen
& Pelvis

☐ CT/ MRI
Head

☐ Urine
Cytology

☐ Other (please specify):

26. At what point during the neoadjuvant regimen do you restage using the above modalities?

☐ After
cycles

☐ After 50% of
cycles

☐ After
completion of
regimen

☐ Other (please
specify):

27. In your practice, what do you estimate to be the average time frame between the final dose of neoadjuvant chemotherapy and cystectomy?

☐ < 2 weeks

☐ 2-4 weeks

☐ 4-6 weeks

☐ 6-8 weeks

☐ > 8 weeks

28. Of patients treated with neoadjuvant chemotherapy, do you then also use adjuvant chemotherapy post-operatively as the standard of care in your practice?

☐ Yes

☐ No

Please skip question 29, 30

29. What are the factors that would make you more or less likely to offer subsequent adjuvant chemotherapy?

30. What regimen of adjuvant chemotherapy would use you in patients who had neoadjuvant chemo and are now post op.?

Regimen (include dose):

Schedule:

Number of Cycles:

31. Any additional comments on the use of neoadjuvant chemotherapy in your practice.