

## BCCA Protocol Summary for Treatment of Locally Advanced Bladder Cancer Using Concurrent Cisplatin with Radiation

<b>Protocol Code:</b>	<i>GUBPRT</i>
<b>Tumour Group:</b>	<i>Genitourinary</i>
<b>Contact Physician:</b>	<i>Dr. Nevin Murray</i>

### **ELIGIBILITY:**

- Locally advanced bladder cancer being treated with radical (curative intent) or radiotherapy intending to improve local control in a high grade palliative setting.
- Transitional cell or squamous pathology.
- Creatinine clearance  $\geq 50$  mL/min.
- Hearing function risk judged acceptable by patient and physician.

### **EXCLUSIONS:**

- contraindication to cisplatin (e.g. deafness, intolerance to fluid load, neuropathy)
- small cell component in pathology
- ECOG status  $\geq 3$
- Macroscopic disease outside the radiotherapy volume.

### **TESTS:**

Baseline and before each treatment (on treatment day or within two previous days, attempt to coordinate with routine radiation therapy tests):

- CBC (with platelets) & diff, creatinine, electrolytes

### **OPTIONAL PREHYDRATION:**

- 1000 mL 2/3 D5W-1/3 NS with 20 mEq potassium chloride and 2 g magnesium sulphate over 1 hour, before cisplatin.

### **PREMEDICATIONS:**

- ondansetron 8 mg PO 30 minutes prior to cisplatin
- dexamethasone 8 mg PO 30 minutes prior to cisplatin

**TREATMENT:**

**Note:** Since cisplatin is used in this protocol as a radio-sensitizing agent, it is to be administered weekly on day 1 or 2 of each week of radiation therapy. Radiation should start after cisplatin infusion is completed (no specific timeframe after cisplatin infusion). If radiation therapy is cancelled on the cisplatin day, do not give cisplatin that day; postpone until radiation therapy resumes.

Drug	Dose	BCCA Administration Guidelines
Cisplatin	40 mg/m <sup>2</sup>	IV in 1000 mL NS with 30 g mannitol and 2 g MgSO <sub>4</sub> , over 1 hour

**Repeat** weekly x 5-7 cycles (also see under **RADIATION THERAPY**).  
No post-hydration.

**ANTI-EMETICS POST-CISPLATIN:**

- dexamethasone 4 mg PO 12 hours after cisplatin, then 4 mg PO q12h x 2
  - days (3 days if necessary)
- dimenhydrinate 50-100 mg PO q4h prn
- lorazepam 1 mg SL q3-4h prn
- prochlorperazine 10 mg PO q3h prn

**DOSE MODIFICATIONS:****Hematologic:**

ANC ≥ 0.8	Proceed with treatment
ANC < 0.8	Consider dose reduction or delay

**Renal Impairment:**

Creatinine clearance ≤ 50 mL/min	Hydrate with 2/3 D5W-1/3NS and 20 mEq KCl/L at 125 mL/hr overnight, repeat creatinine in a.m.
Serum creatinine ≤ 50 mL/min hydration	Discontinue protocol

**RADIATION THERAPY:**

Radiation schedule must be greater than a 2 week course.

**PRECAUTIONS:**

1. **Renal Toxicity:** Nephrotoxicity is common with cisplatin. Encourage oral hydration. Avoid nephrotoxic drugs such as aminoglycosides.

2. **Neutropenia:** Fever or other evidence of infection must be assessed promptly and treated aggressively.

**Call Dr. Nevin Murray or tumour group delegate @ (604) 877-6000 or 1-800-663-3333 with any problems or questions regarding this treatment program.**

<b>Date activated:</b>	1 Jul 2007 (as GUBRADC)
<b>Date revised:</b>	1 Oct 2007 (protocol code changed)

## **REFERENCES**

1. Coppin CML, Gospodarowicz MK, James K, et al. Improved local control of invasive bladder cancer by concurrent cisplatin and preoperative or definitive radiation. *J Clin Oncol* 14:2901-7, 1996
2. Keyes H, Bundy B, Stehman F, et al. Cisplatin, radiation, and adjuvant hysterectomy compared with radiation and adjuvant hysterectomy for bulky stage 1B cervical carcinoma. *NEJM* 340:1154-1161, 1999