

BC Cancer Protocol Summary for Treatment of Locally Advanced Nasopharyngeal Cancer with Concurrent CISplatin and Radiation

Protocol Code:

HNNLAPRT

Tumour Group:

Head and Neck

Contact Physician:

Dr. Cheryl Ho

ELIGIBILITY:

- locally advanced nasopharyngeal cancer
- suitable for radical radiation
- Patients with squamous cell carcinoma of the head and neck or squamous cell carcinoma of unknown primary who are unable to tolerate the standard option of HNNLAPRT, (CISplatin 100mg/m² q3wk), may receive HNNLAPRT as an alternative.
- ECOG 0-2

EXCLUSIONS:

- contraindication to CISplatin (e.g. deafness, intolerance to fluid load, neuropathy)

TESTS:

- Baseline bloodwork: CBC & diff, creatinine, [ALT](#), [bilirubin](#), [Alk Phos](#), [sodium](#), [potassium](#), BUN, albumin, magnesium, calcium, phosphate
- If clinically indicated for patients judged to be at risk for hepatitis B baseline: (Results do not have to be available to proceed with treatment) HBsAg, anti-HBsAg and anti-HBcAg (=HBcoreAb)

Before each treatment (on treatment day or previous day, attempt to coordinate with routine radiation therapy tests):

- CBC & diff, creatinine, [sodium](#), [potassium](#), calcium, albumin, magnesium weekly during chemotherapy

Mid-treatment week 3 or 4

- If clinically indicated: ALT, HBviralDNA

PREHYDRATION:

1,000 mL NS with 20 mEq potassium chloride and 2 g magnesium sulphate over 1 hour, prior to CISplatin

ANTIEMETICS:

As per highly emetogenic protocol (see [SCNAUSEA](#) protocol)

TREATMENT:

Note: Since CISplatin is a radio-sensitizing as well as an active agent, it is to be administered on a day on which radiation therapy is delivered. If radiation therapy is cancelled, do not give CISplatin that day: postpone until radiation therapy resumes.

Drug	Dose	BC Cancer Administration Guidelines
CISplatin	40 mg/m ²	IV in 100 to 500 mL NS over 30 minutes to 1 hour

Repeat weekly x 7 cycles (each week is one cycle). Patients are to receive at least 2 cycles of CISplatin with radiation. Recommended to have clinical assessment after every 2 cycles (ie, every 3rd cycle).

DOSE MODIFICATIONS:

1. Hematological:

ANC (x 10 ⁹ /L)		Platelets (x 10 ⁹ /L)	Dose
greater than or equal to 0.8	and	greater than or equal to 100	100%
less than 0.8	or	less than 100	50% dose reduction

2. Renal dysfunction:

Creatinine Clearance (mL/min)	Dose
less than 50 mL/min	Delay chemotherapy, recheck in 1 week
less than 50 mL/min after overnight hydration	Discontinue protocol

PRECAUTIONS:

- Renal Toxicity:** Nephrotoxicity is common with CISplatin. Encourage oral hydration. Avoid nephrotoxic drugs such as aminoglycosides.
- Ototoxicity:** CISplatin is ototoxic and its use must be cautioned in individuals with existing hearing loss.
- Neutropenia:** Fever or other evidence of infection must be assessed promptly and treated aggressively.
- Hepatitis B Reactivation:** Patients who have elevated ALT levels along with a positive anti-HBcAg may require treatment with lamivudine 100mg orally daily for the entire duration of chemotherapy and for six months afterwards. Such patients should also be monitored with ALT and HB viral DNA levels mid-treatment, week 3 or 4. If the hepatitis B virus DNA level rises during this monitoring, management should be reviewed with an appropriate specialist with experience managing hepatitis and consideration given to halting chemotherapy.

Call Dr. Cheryl Ho or tumour group delegate at (604) 877-6000 or 1-800-663-3333 with any problems or questions regarding this treatment program.

References

- Yau TK, et al. Induction chemotherapy with cisplatin and gemcitabine followed by accelerated radiotherapy and concurrent cisplatin in patients with stage IV(A-B) nasopharyngeal carcinoma. *Head Neck* 2006;28(10):880-7.

2. Chan ATC, Overall survival after concurrent cisplatin–radiotherapy compared with radiotherapy alone in locoregionally advanced nasopharyngeal carcinoma. *J Natl Cancer Inst* 2005; 97:536-9.
3. Chan ATC, et al. Concurrent chemotherapy-radiotherapy compared with radiotherapy alone in locoregionally advanced nasopharyngeal carcinoma: Progression free survival analysis of a phase III randomized trial. *J Clin Oncol* 2002;20:2038-44.