

# BC Cancer Protocol Summary for Treatment of Recurrent and/or Metastatic Nasopharyngeal Cancer with Platinum and Etoposide

**Protocol Code**

*HNNAVPE*

**Tumour Group**

*Head and Neck*

**Contact Physician**

*Dr. Cheryl Ho*

## ELIGIBILITY:

- Recurrent or metastatic nasopharyngeal head and neck cancer
- Fit for combination chemotherapy (ECOG 0-2)
- Normal bone marrow function
- If there is a contraindication to CISplatin (e.g. deafness, intolerance to fluid load, neuropathy), consideration should be given to using CARBOplatin.

## TESTS:

- Baseline: CBC & Diff, creatinine, total bilirubin
- Before each cycle: CBC & Diff, creatinine
- If clinically indicated: total bilirubin

## PREMEDICATIONS:

- Antiemetic protocol for moderately emetogenic chemotherapy (see [SCNAUSEA](#))
  - For CISplatin doses greater than or equal to 50 mg, or if using CARBOplatin, use antiemetic protocol for highly emetogenic chemotherapy (see [SCNAUSEA](#))
- hydrocortisone and diphenhydrAMINE for history of hypersensitivity to etoposide

## TREATMENT:

Drug	Dose	BC Cancer Administration Guideline
<b>CISPLATIN IS GIVEN PRIOR TO ETOPOSIDE</b>		
CISplatin	25 mg/m <sup>2</sup> /day x 3 days (Days 1, 2, 3)	IV in NS 100 to 250 mL* over 20 to 30 minutes
etoposide	100 mg/m <sup>2</sup> /day x 3 days (Days 1, 2, 3)	IV in NS 250 to 1000 mL over 45 minutes to 1 hour 30 minutes (use non-DEHP equipment with 0.2 micron in-line filter)

\*If CISplatin dose less than or equal to 60 mg use NS 100 mL, if CISplatin dose greater than 60 mg use NS 250 mL

- Repeat every 3 weeks for 4 cycles.

**Alternatively, CARBOplatin may be used instead of CISplatin:**

<b>Drug</b>	<b>Dose</b>	<b>BC Cancer Administration Guidelines</b>
CARBOplatin	AUC 5 or 6 DAY 1 only Dose = AUC <sup>†</sup> x (GFR* + 25)	IV in 100 to 250 mL NS over 30 minutes.

<sup>†</sup> determined at discretion of the attending medical oncologist.

\*GFR preferably from nuclear renogram, if not possible use:

$$\text{GFR} = \frac{N \times (140 - \text{age in years}) \times \text{wt (kg)}}{\text{serum creatinine (micromol/L)}} \quad N = 1.04 \text{ (women) or } 1.23 \text{ (men)}$$

The estimated GFR should be capped at 125 mL/min when it is used to calculate the initial CARBOplatin dose. When a nuclear renogram is available, this clearance would take precedence.

**DOSE MODIFICATIONS:**

**1. Hematological**

- Modify etoposide dose according to scheduled treatment day counts

<b>ANC (x 10<sup>9</sup>/L)</b>		<b>Platelets (x 10<sup>9</sup>/L)</b>	<b>Dose (etoposide)</b>
greater than or equal to 1.5	and	greater than or equal to 100	100% of full daily dose
1.0 to less than 1.5	or	75 to less than 100	75% of full daily dose
less than 1.0	or	less than 75	Delay one week *

\* Give a reduced dose according to the table for the treatment day count

**2. Renal dysfunction**

<b>Calculated Creatinine clearance (mL/min)</b>	<b>Dose (CISplatin)</b>	<b>Dose (etoposide)</b>
greater than or equal to 60 mL/min	100%	100%
45 to less than 60 mL/min	75% or go to CARBOplatin option	75%
Less than 45 mL/min	Hold CISplatin or delay with additional IV fluids or go to CARBOplatin option	50%

### 3. Hepatic dysfunction

Serum bilirubin (micromoL/L)	Dose (etoposide)
Less than 25	100%
25 to 50	50%
51 to 85	25%
Greater than 85	Do not administer

#### PRECAUTIONS:

1. **Neutropenia:** Fever or other evidence of infection must be assessed promptly and treated aggressively.
2. **Renal Toxicity:** Nephrotoxicity is common with CISplatin. Encourage oral hydration. Avoid nephrotoxic drugs such as aminoglycoside antibiotics.

**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:

1. Osoba D, et al. Phase II study on the efficacy of weekly cisplatin-based chemotherapy in recurrent and metastatic head and neck cancer. *Ann Oncol* 1992;3 (Suppl.3):S57-S62.
2. Chi KH, Chang YC, Chan WK, et al. A phase II study of carboplatin in nasopharyngeal carcinoma. *Oncology* 1997;54(3):203-7.