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, bilirubin
- Before each cycle: CBC, diff, creatinine
- If clinically indicated: bilirubin

PREMEDICATIONS:

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

TREATMENT:

- CISplatin and etoposide

Drug	Dose	BC Cancer Administration Guideline
CISPLATIN IS GIVEN PRIOR TO ETOPOSIDE		
CISplatin	25 mg/m²/day x 3 days (Days 1, 2, 3)	IV in NS 100 to 250 mL* over 20 to 30 minutes
etoposide	100 mg/m²/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:

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

† determined at discretion of the attending medical oncologist.

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

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

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

ANC (x 10^9/L)		Platelets (x 10^9/L)	Dose (etoposide)
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

Calculated Creatinine clearance (mL/min)	Dose (CISplatin)	Dose (etoposide)
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.