

BCCA Protocol Summary for Advanced Nasopharyngeal Cancer of the Head and Neck using CISplatin and Fluorouracil

Protocol Code: HNNAVFUP
Tumour Group: Head and Neck
Contact Physician: Dr. Cheryl Ho

ELIGIBILITY:

- Locoregionally recurrent/metastatic head and neck cancer (nasopharyngeal or sinonasal undifferentiated carcinoma) with ECOG status 0-2
- normal hepatic and renal function
- adequate marrow function
- Intravascular device (e.g. PORT-A-CATH® or PICC® line) is highly recommended

TESTS:

- Baseline: CBC & diff, platelets, creatinine, electrolytes, serum calcium, serum magnesium, serum albumin, AST, bilirubin
- Before each treatment: CBC & diff, creatinine
- If indicated: bilirubin

PREMEDICATION:

- Ondansetron 8 mg po and Dexamethasone 8 mg po 30 minutes pre-CISplatin each day ant at least every 12 hours regularly during each day
- Prochlorperazine is usually sufficient after 3-5 days of ondansetron and dexamethasone
- Optional: Aprepitant 125 mg PO 30 minutes pre-chemotherapy on day 1 and 80 mg PO once daily in the morning on Days 2 and 3

TREATMENT:

Drug	Dose	BCCA Administration Guidelines
Fluorouracil (5FU)	1,000 mg/m ² /day for 4 days (total dose = 4,000 mg/m ² over 96 h)	IV in D5W to a total volume of 192 mL by continuous infusion at 2 mL/h via appropriate infusor device*
CISplatin	25 mg/m ² Daily for 3-4 days	IV in 100 mL NS over 30 min (use 250 mL NS if greater than 60 mg)

*Inpatients: 1,000 mg/m²/day in 1,000 mL D5W by continuous infusion daily over 24 h for 4 days

- The cycle is repeated every 4 weeks.

DURATION OF THERAPY:

Treatment may continue for a total of 6 cycles or to patient tolerance.

DOSE MODIFICATIONS:**1. Hematological**

- Modify 5-Fluorouracil ONLY:

ANC (x 10 ⁹ /L)		Platelets (x 10 ⁹ /L)	Dose (Fluorouracil only)
1 – 1.5	or	75 – 100	750 mg/m ² /d x 4 days
less than 1	or	less than 75	375 mg/m ² /d x 4 days

2. Renal Toxicity

- Modify CISplatin dose according to renal function

Creatinine clearance (mL/min)	Dose (CISplatin only)
greater than or equal to 60	100%
45-59	50%
less than 45	Delay x 1 week

Calculation of the creatinine clearance rate (estimated using standard formula) should be done every cycle because patients who have lost weight may have normal serum creatinine, but have abnormal estimated creatinine clearance. If estimated creatinine clearance changes to less than 60 mL/min, dose reduction should be considered.

$$\text{Creatinine clearance} = \frac{N^* \times (140 - \text{age}) \times \text{weight (kg)}}{\text{Serum Creatinine micromol/L}}$$

* for males N = 1.23, for females N = 1.04

3. Neurotoxicity:

- Tinnitus, mild high frequency hearing loss, and delayed peripheral neuropathy may occur secondary to CISplatin. The latter are generally reversible with time. If clinically significant hearing loss or functionally significant peripheral neuropathy occurs, discontinue CISplatin only.
- CNS toxicity due to 5-Fluorouracil is infrequent, but would necessitate cessation of treatment

4. GI Toxicity:

Symptom	Grade	Description	Dose
Nausea and Vomiting	4	greater than 10 episodes in 24 h or needs parenteral support, dehydration	If not controlled by antiemetics, give 75% dose CISplatin or stop treatment

G.I. tract toxicity consisting of stomatitis or diarrhea and cramps suggestive of drug toxicity and is indication to stop therapy.

PRECAUTIONS:

1. **Nausea and vomiting** are common and patients should be treated with ondansetron, and dexamethasone before at least every 12 hours regularly during this treatment; aprepitant may be added (see premedication section)
2. **Renal toxicity** may occur with a salt and water losing nephropathy. Patients should be encouraged to maintain good oral hydration.
3. Development of **cardiac symptoms** including signs suggestive of ischemia or of cardiac arrhythmia is potentially due to **fluorouracil** and is an indication to stop therapy.
4. **Possible drug interactions with fluorouracil and warfarin, phenytoin and fosphenytoin** have been reported and may occur at any time. Close monitoring is recommended (eg, for warfarin, monitor INR weekly during fluorouracil therapy and for 1 month after stopping fluorouracil).

Contact 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.

Date activated: 22 Jul 1998 (as combined modality with radiation)

Date revised: 1 June 2011 (Infusion section revised)