

BCCA Protocol Summary for Treatment of Recurrent or Metastatic Nasopharyngeal Carcinoma with CARBOplatin and PACLItaxel

Protocol Code: UHNNAVPC

Tumour Group: Head and Neck

Contact Physician: Dr. Cheryl Ho

ELIGIBILITY:

- Recurrent or metastatic nasopharyngeal carcinoma
- Adequate hematologic, hepatic and renal function.
- Age greater than or equal to 18 years.
- ECOG performance status 0, 1 or 2.
- A BCCA “Compassionate Access Program” form with appropriate clinical information for each patient must be submitted and approved prior to treatment.

TESTS:

- Baseline: CBC & differential, platelets, creatinine, liver function tests
- Before each treatment: CBC & differential, platelets, creatinine, any initially elevated tumor marker
- If clinically indicated: liver function tests prior to each cycle

PREMEDICATIONS:

- **PACLI**taxel must not be started unless the following drugs have been given:
 - 45 minutes prior to **PACLI**taxel:
 - Dexamethasone 20 mg IV in 50 mL NS over 15 minutes
 - 30 minutes prior to **PACLI**taxel:
 - DiphenhydrAMINEe 50 mg IV and Ranitidine 50 mg IV in 50 mL NS over 20 minutes (compatible up to 3 hours when mixed in bag)
- Antiemetic protocol for High emetogenic chemotherapy (see protocol SCNAUSEA)

TREATMENT: (Give **PACLI**taxel first)

Drug	Dose	BCCA Administration Guideline
PACLI taxel	200 mg/m ²	IV in 500 mL NS over 3 hours (use non-PVC equipment, in-line filter)
CARBO platin	AUC 6 Dose = AUC x (GFR* + 25)	IV in 250 mL D5W over 30 minutes

- Repeat every 21 days x 4-6 cycles

*Measured GFR (e.g. nuclear renogram) is preferred whenever feasible, *particularly* in circumstances of co-morbidity that could affect renal function (third-space fluid accumulations, hypoproteinemia, potentially inadequate fluid intake, etc.). The lab reported GFR (MDRD formula) may be used as an alternative to the Cockcroft-Gault estimate of GFR; the estimated GFR reported by the lab or calculated using the Cockcroft-Gault equation 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.

Cockcroft-Gault Formula

$$\text{GFR} = \frac{N^* \times (140 - \text{age in years}) \times \text{wt (kg)}}{\text{serum creatinine (micromol/L)}}$$

*For males $N = 1.23$; for females $N = 1.04$

Note: The same method of estimation should be used throughout the treatment course (i.e. if lab reported GFR was used initially, this should be used for dosing in all subsequent cycles and not the Cockcroft-Gault estimate).

DOSE MODIFICATIONS:

1. Hematology (on treatment day):

ANC (x 10 ⁹ /L)		Platelets (x 10 ⁹ /L)	Doses (both drugs)
greater than or equal to	And	greater than or equal to 100	100%
less than 1	Or	less than 100	delay until recovery

- Arthralgia and/or myalgia:** If arthralgia and/or myalgia of grade 2 (moderate) or higher is not relieved by adequate doses of NSAIDs or acetaminophen with codeine (e.g., **TYLENOL #3®**), a limited number of studies report a possible therapeutic benefit using:
 - Prednisone 10 mg po bid x 5 days starting 24 hours post-**PACLI**taxel
 - Gabapentin 300 mg po on day before chemotherapy, 300 mg bid on treatment day, then 300 mg tid x 7-10 daysIf arthralgia and/or myalgia persists, reduce subsequent **PACLI**taxel doses to 175 mg/m².
- Neuropathy:** Dose modification or discontinuation may be required (see BCCA Cancer Drug Manual).
- Renal dysfunction:** If significant increase (greater than 20%) in creatinine, repeat nuclear renogram (if available) and recalculate **CARBO**platin dose using new GFR.
- Hepatic dysfunction:** Dose reduction may be required for **PACLI**taxel (see BCCA Cancer Drug Manual)

PRECAUTIONS:

1. **Hypersensitivity:** Reactions are common. See BCCA Hypersensitivity Guidelines

<i>mild</i> symptoms (e.g. mild flushing, rash, pruritus)	<ul style="list-style-type: none">complete PACLItaxel infusion. Supervise at bedsideno treatment required
<i>moderate</i> symptoms (e.g. moderate rash, flushing, mild dyspnea, chest discomfort, mild hypotension)	<ul style="list-style-type: none">stop PACLItaxel infusiongive IV DiphenhydrAMINEe 25-50 mg and IV Hydrocortisone IV 100 mgafter recovery of symptoms resume PACLItaxel infusion at 20 mL/hr for 5 minutes, 30 mL/hr for 5 minutes, 40 mL/hr for 5 minutes, then 60 mL/hr for 5 minutes. If no reaction, increase to full rate.if reaction recurs, discontinue PACLItaxel therapy
<i>severe</i> symptoms (i.e. <i>one</i> or more of respiratory distress requiring treatment, generalized urticaria, angioedema, hypotension requiring therapy)	<ul style="list-style-type: none">stop PACLItaxel infusiongive IV antihistamine and steroid as above. Add Epinephrine or bronchodilators if indicateddiscontinue PACLItaxel therapy

- Extravasation:** **PACLI**taxel causes pain and may, rarely, cause tissue necrosis if extravasated. Refer to BCCA Extravasation Guidelines.
- Neutropenia:** Fever or other evidence of infection must be assessed promptly and treated aggressively.

Call Dr. Cheryl Ho or tumour group delegate at (604) 930-2098 or 1-800-523-2885 with any problems or questions regarding this treatment program.

Date activated: 1 Jul 2010

Date revised: 1 Apr 2011 (estimated GFR capped, reformatted with TALLman lettering)

References:

- Ciuleanu TE, Fountzilias G, Ciuleanu E, et al. Paclitaxel and carboplatin in relapsed or metastatic nasopharyngeal carcinoma: a multicenter phase II study. J BUON. 2004;9(2):161-5.
- Yeo W, Leung TW, Chan AT, et al. A phase II study of combination paclitaxel and carboplatin in advanced nasopharyngeal carcinoma. Eur J Cancer 1998;34(13):2027-31.
- Tan EH, Khoo KS, Wee J, et al. Phase II trial of a paclitaxel and carboplatin combination in Asian patients with metastatic nasopharyngeal carcinoma. Ann Oncol 1999;10(2):235-7.
- Airoldi M, Pedani F, Marchionatti S, et al. Carboplatin plus taxol is an effective third-line regimen in recurrent undifferentiated nasopharyngeal carcinoma. Tumori 2002;88(4):273-6.