

# BCCA Protocol Summary For Treatment Of Recurrent Or Metastatic Nasopharyngeal Cancer With Capecitabine

**Protocol Code**

*UHNNAVCAP*

**Tumour Group**

*Head and Neck*

**Contact Physician**

*Dr. Cheryl Ho*

## **ELIGIBILITY:**

BCCA protocol summary for treatment of recurrent or metastatic nasopharyngeal cancer with capecitabine

- Recurrent or metastatic nasopharyngeal carcinoma
- Prior treatment with platinum therapy
- ECOG performance status 0-2
- expected survival greater than 3 months
- patient must be able to report any severe toxicity such as diarrhea, hand/foot syndrome, severe nausea, stomatitis
- A BCCA “Compassionate Access Program” form with appropriate clinical information for each patient must be submitted and approved prior to treatment.

## **EXCLUSIONS:**

- severe renal impairment (calculated creatinine clearance less than 30 mL/min, see Cockcroft-Gault equation under **DOSE MODIFICATIONS**)
- suspected dihydropyrimidine dehydrogenase (DPD) deficiency (see **PRECAUTIONS**)

## **CAUTIONS:**

- severe hepatic dysfunction (total bilirubin greater than 50 micromol/L)

## **TESTS:**

- Baseline: CBC & diff, platelets, liver function tests, and creatinine
- **Prior to each** cycle: CBC & diff, platelets, creatinine
- If clinically indicated: liver function tests, BUN

## **PREMEDICATIONS:**

- not usually required

**TREATMENT:**

Drug	Dose*	BCCA Administration Guideline
Capecitabine	1000-1250 mg/m <sup>2</sup> BID x 14 days (d 1-14) (Total daily dose = 2000-2500 mg/m <sup>2</sup> /day)	PO with food

\*Starting dose of 1000 mg/m<sup>2</sup> bid recommended for elderly, poor performance status or extensively pretreated. Capecitabine is available as 150 mg and 500 mg tablets (see following table for dose calculations).

Repeat every 21 days x 6-8 cycles. Responding patient may be continued on treatment at the discretion of the treating physician. Discontinue if no response after 2 cycles or unacceptable toxicity.

**Dose Calculation Table**

Single Dose (mg)	Number of tablets per dose	
	150 mg	500 mg
1500	0	3
1650	1	3
1800	2	3
2000	0	4
2150	1	4
2300	2	4
2500	0	5
2650	1	5
2800	2	5

**DOSE MODIFICATIONS:****1. Hematological**

ANC (x10 <sup>9</sup> /L)		Platelets (x10 <sup>9</sup> /L)	1 <sup>st</sup> Event Dose	2 <sup>nd</sup> Event Dose	3 <sup>rd</sup> Event Dose	4 <sup>th</sup> Event Dose
greater than or equal to 1.5	and	greater than or equal to 75	100%	100%	100%	100%
1 – 1.49	or	50-74.9	delay* then 100%	delay* then 75%	delay* then 50%	discontinue
0.5-0.99	or	25-49.9	delay* then 75%	delay* then 50%	discontinue	discontinue
less than 0.5	or	less than 25	discontinue or delay* then 50%	discontinue	discontinue	discontinue

\*delay until ANC greater than or equal to 1.5 x 10<sup>9</sup>/L and platelets greater than or equal to 75 x 10<sup>9</sup>/L

## 2. Hand-Foot Skin Reaction

- if treatment is interrupted due to toxicity, retain the original stop and start dates (ie, do not make up for missed doses when treatment is resumed)

Grade	Hand-Foot Skin Reaction	1 <sup>st</sup> Event Dose	2 <sup>nd</sup> Event Dose	3 <sup>rd</sup> Event Dose	4 <sup>th</sup> Event Dose
1	Skin changes with discomfort (eg, numbness, dysesthesia, paresthesia, tingling, erythema) not disrupting normal activities	100%	100%	100%	100%
2	Skin changes with pain (eg, erythema, swelling) affecting activities of daily living	delay* then 100%	delay* then 75%	delay* then 50%	discontinue
3	Severe skin changes with pain (eg, moist desquamation, ulceration, blistering) causing severe discomfort and inability to work or perform activities of daily living	delay* then 75%	discontinue or delay* then 50%	discontinue	discontinue

\*stop treatment immediately and delay until resolved to grade 0-1

## 3. Other Non-Hematological Toxicity

- see next table for toxicity grading criteria for diarrhea, nausea and vomiting, and stomatitis
- if treatment is interrupted due to toxicity, retain the original stop and start dates (ie, do not make up for missed doses when treatment is resumed)

Toxicity Grade	1 <sup>st</sup> Event Dose	2 <sup>nd</sup> Event Dose	3 <sup>rd</sup> Event Dose	4 <sup>th</sup> Event Dose
0-1	100%	100%	100%	100%
2	delay* then 100%	delay* then 75%	delay* then 50%	discontinue
3	delay* then 75%	delay* then 50%	discontinue	discontinue
4	discontinue or delay* then 50%	discontinue	discontinue	discontinue

\*stop treatment immediately and delay until toxicity resolved to grade 0-1

**Toxicity Criteria**

Grade	Diarrhea	Nausea and Vomiting	Stomatitis
0-1	Increase of 2-3 stools/day or nocturnal stools	1 vomit/day but can eat	Painless ulcers, erythema or mild soreness
2	Increase of 4-6 stools/day or nocturnal stools	2-5 vomits/day; intake decreased but can eat	Painful erythema, edema or ulcers but can eat
3	Increase of 7-9 stools/day or incontinence, malabsorption	6-10 vomits/day and cannot eat	Painful erythema, edema or ulcers and cannot eat
4	Increase of 10 or more stools/day or grossly bloody diarrhea; may require parenteral support; dehydration	10 vomits or more per day or requires parenteral support; dehydration	Mucosal necrosis, requires parenteral support

**4. Hepatic dysfunction:** Dose modification may be required. Capecitabine has not been studied in severe hepatic dysfunction.

**5. Renal dysfunction:**

Creatinine Clearance mL/min	Dose
greater than 50	100%
30-50	75%
less than 30	0%

Cockcroft-Gault Equation:

$$\text{Estimated creatinine clearance: (mL/min)} = \frac{N (140 - \text{age}) \text{ wt (kg)}}{\text{serum creatinine (micromol/L)}}$$

- N = 1.23 male
- N = 1.04 female

**PRECAUTIONS:**

1. **Neutropenia:** Fever or other evidence of infection must be assessed promptly and treated aggressively.
2. **Dihydropyrimidine dehydrogenase (DPD) deficiency** can result in severe toxicity secondary to reduced drug metabolism.
3. **Possible interactions with warfarin, phenytoin and fosphenytoin** have been reported and may occur at any time. Close monitoring is recommended (eg, for warfarin, monitor INR weekly during capecitabine therapy and for 1 month after stopping capecitabine).
4. **Myocardial ischemia and angina** occur rarely in patients receiving Capecitabine. Development of cardiac symptoms, including signs of cardiac ischemia or new arrhythmia should prompt discontinuation of Capecitabine.

**Call Dr. Cheryl Ho or tumour group delegate at (604) 930-2098 or 1-800-663-3333 with any problems or questions regarding this treatment program.**

Date activated: 1 Jul 2010

Date revised: 01 Apr 2011 (use of pyridoxine deleted)

### **Reference**

1. Chua D, Wei WI, Sham JST, Au GKH. Capecitabine monotherapy for recurrent and metastatic nasopharyngeal cancer. *Jpn J Clin Oncol* 2008 38(4):244-9.
2. Ciuleanu E, Irimie A, Ciuleanu TE, et al. Capecitabine as salvage treatment in relapsed nasopharyngeal carcinoma: a phase II study. *J BUON*. 2008;13(1):37-42.