BCCA Protocol Summary for Treatment of Advanced Salivary Gland Cancers with Platinum, DOXOrubicin, and Cyclophosphamide

***Protocol Code**:* *HNSAVPAC*

***Tumour Group**:* *Head and Neck*

***Contact Physician**:* *Dr. Cheryl Ho*

ELIGIBILITY:

- Recurrent or metastatic carcinoma of the salivary glands
- Adequate hematologic, hepatic, and renal function:
- ECOG performance status 0, 1 or 2.
- Protocol **NOT** to be delivered with concurrent radiotherapy.

EXCLUSIONS:

- History of congestive heart failure

TESTS:

- Baseline: CBC & differential, platelets, creatinine, bilirubin.
- Before each treatment: CBC & differential, platelets, creatinine.
- If clinically indicated: bilirubin.

PREMEDICATIONS:

Antiemetic protocol for highly emetogenic chemotherapy (see protocol SCNAUSEA).

TREATMENT:

Drug	Dose	BCCA Administration Guideline
DOXOrubicin	50 mg/m^2	IV push (may be given during prehydration)
CISplatin	50 mg/m^2	Prehydrate with NS 1000 mL over 1 hour, then CISplatin IV in NS 500 mL with potassium chloride 20 mEq, magnesium sulfate 1 g, mannitol 30 g over 1 hour
Cyclophosphamide	500 mg/m^2	IV in NS 100 to 250* mL over 20 min to 1 hour (*use 250 mL for doses greater than 1000 mg)

- Repeat every 21 days x 6 to 8 cycles (may continue until disease progression or toxicity per physician's discretion).
- If no response after 4 cycles, discontinue treatment.

DOSE MODIFICATIONS:

1. HEMATOLOGY

For cyclophosphamide and DOXOrubicin:

ANC (x 10^9/L)		Platelets (x 10^9/L)	Cyclophosphamide and DOXOrubicin Dose
greater than or equal to 1.5	and	greater than or equal to 100	100%
1 to 1.49	or	75 to 99	50%
less than 1	or	less than 75	**Delay**

2. HEPATIC DYSFUNCTION

For DOXOrubicin:

Bilirubin (micromol/L)	DOXOrubicin Dose
25 to 36	50%
greater than 36	**Delay**

3. RENAL DYSFUNCTION

For CISplatin:

Calculated Creatinine Clearance (mL/min)	CISplatin dose
greater than or equal to 60	100%
45 to 59	75% (same prehydration as full dose)
less than 45	hold CISplatin or delay with additional IV fluids

For cyclophosphamide:

Calculated Creatinine Clearance (mL/min)	Cyclophosphamide dose
greater than or equal to 10	100%
less than 10	75%

PRECAUTIONS:

1. **Extravasation**: DOXOrubicin can cause pain and tissue necrosis if extravasated. Refer to BCCA Extravasation Guidelines.
2. **Neutropenia**: Fever or other evidence of infection must be assessed promptly and treated aggressively.

3. **Renal Toxicity**: Nephrotoxicity is common with CISplatin. Encourage oral hydration. Avoid nephrotoxic drugs such as aminoglycoside antibiotics. Use caution with pre-existing renal dysfunction.
4. **Cardiac Toxicity**: DOXOrubicin is cardiotoxic and must be used with caution, if at all, in patients with severe hypertension or cardiac dysfunction. Cardiac assessment recommended if lifelong dose of 450 mg/m^2 to be exceeded. Refer to the BCCA Cancer Drug Manual for more information.
5. **Neuropathy**: Dose modification or discontinuation may be required. Refer to the BCCA Cancer Drug Manual for more information.

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.

Date activated: 1 Feb 2012

Date revised:

REFERENCES:

1. Dimery IW, Legha SS, Shirinian M, et al. Fluorouracil, doxorubicin, cyclophosphamide, and cisplatin combination chemotherapy in advanced or recurrent salivary gland carcinoma. J Clin Oncol 1990;8(6):1056-62.
2. Licitra L. et al. cisplatin, doxorubicin and cyclophosphamide in advanced salivary gland carcinoma. A phase II trial of 22 patients. Ann Oncol 1996;7:640-2.