

BCCA Protocol Summary for Palliative Therapy for Metastatic Breast Cancer using Cyclophosphamide, Doxorubicin and Fluorouracil

Protocol Code:

BRAVCAF

Tumour Group:

Breast

Contact Physician:

Dr. Karen Gelmon

ELIGIBILITY:

- Palliative treatment for advanced breast cancer.

TESTS:

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

PREMEDICATIONS:

- Antiemetic protocol for High/Moderate emetogenic chemotherapy (see protocol SCNAUSEA)

TREATMENT:

Drug	Dose	BCCA Administration Guideline
<u>doxorubicin</u> (ADRIAMYCIN®)	50 mg/m ²	IV push
<u>fluorouracil (5-FU)</u>	500 mg/m ²	IV push
<u>cyclophosphamide</u>	500 mg/m ²	IV in 100 to 250 mL NS or D5W over 20 min to 1 hour

Repeat every 21 days x 6-8 cycles.

DOSE MODIFICATIONS:

1. Hematological:

ANC (x10 ⁹ /L)	Platelets (x10 ⁹ /L)	Dose (all drugs)
greater than or equal to 1.5	greater than or equal to 90	100%
1.0-1.49	70-89	75%
less than 1.0	less than 70	delay

2. Hepatic dysfunction:

Bilirubin (micromol/L)	Dose
25-50	50% doxorubicin-100% cyclophosphamide
51-85	25% doxorubicin-100% cyclophosphamide
greater than 85	delay

3. **Renal dysfunction:** Dose modification may be required for cyclophosphamide (see BCCA [Cancer Drug Manual](#)).

PRECAUTIONS:

1. **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 400 mg/m² to be exceeded (see BCCA Cancer Drug Manual).
2. **Extravasation:** Doxorubicin causes pain and tissue necrosis if extravasated. Refer to BCCA [Extravasation Guidelines](#).
3. **Neutropenia:** Fever or other evidence of infection must be assessed promptly and treated aggressively.
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).

Call Dr. Karen Gelmon or tumour group delegate at (604) 877-6000 or 1-800-663-3333 with any problems or questions regarding this treatment program.

Date revised: 1 June 2011 (Infusion section revised)

REFERENCES:

Bennett JM, Muss HB, Doroshaw JH, et al. A randomized multicenter trial comparing mitoxantrone, cyclophosphamide, and fluorouracil with doxorubicin, cyclophosphamide, and fluorouracil in the therapy of metastatic breast cancer. [J Clin Oncol](#) 1988;6(10):1611-20.