

BCCA Protocol Summary for Adjuvant Therapy for Breast Cancer using Doxorubicin and Cyclophosphamide

Protocol Code

BRAJAC

Tumour Group

Breast

Contact Physician

Dr. Karen Gelmon

ELIGIBILITY:

- Adjuvant treatment for high risk breast cancer without systemic metastases.

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®)	60 mg/m ²	IV push
<u>cyclophosphamide</u>	600 mg/m ²	IV in 100 to 250 mL NS or D5W over 20 min to 1 hour

- Repeat every 21 days x 4 cycles.
- If radiation therapy is required, it is given following completion of chemotherapy (BCCA Cancer Management Manual).

DOSE MODIFICATIONS:

1. Hematological:

ANC (x 10 ⁹ /L)	Platelets (x 10 ⁹ /L)	Dose (both 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:** Dose modification required for doxorubicin (see BCCA Cancer Drug Manual).
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.

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)

Reference:

Fisher B, Brown AM, Dimitrov NV, et al. Two months of doxorubicin-cyclophosphamide with and without interval reinduction therapy compared with 6 months of cyclophosphamide, methotrexate and fluorouracil in positive-node breast cancer patients with tamoxifen-nonresponsive tumors: results from the National Surgical Adjuvant Breast and Bowel Project B-15. J Clin Oncol 1990;8(9):1483-96.