

BCCA Protocol Summary for Palliative Therapy for Advanced Breast Cancer using Cyclophosphamide, Methotrexate and Fluorouracil

Protocol Code:

BRAVCMF

Tumour Group:

Breast

Contact Physician:

Dr. Susan Ellard

ELIGIBILITY:

- Palliative treatment for advanced breast cancer.

TESTS:

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

PREMEDICATIONS:

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

TREATMENT:

Drug	Dose	BCCA Administration Guideline
cyclophosphamide	600 mg/m ²	IV in 100 to 250 mL NS over 20 min to 1 hour
methotrexate	40 mg/m ²	IV push
fluorouracil (5-FU)	600 mg/m ²	IV push

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. Renal dysfunction:

For Methotrexate

BC Cancer agency Cancer Drug Manual© suggested dose modifications:

Creatinine clearance (mL/min)	Methotrexate dose
61-80	75%
51-60	70%
10-50	30-50%
less than 10	avoid

$$\text{Calculated creatinine clearance} = \frac{N \times (140 - \text{Age}) \times \text{weight (kg)}}{\text{Serum Creatinine in micromol/L}}$$

N for Males = 1.23, Females = 1.04

For Cyclophosphamide:

BC Cancer agency Cancer Drug Manual© suggested dose modifications:

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

3. Hepatic dysfunction:

For Methotrexate:

Bilirubin (micromol/L)		AST (units/L)	Methotrexate Dose
less than 50		less than 180	100%
50-85	or	greater than 180	75%
greater than 85			Omit dose

For 5-Fluorouracil

Bilirubin (micromol/L)	Fluorouracil Dose
greater than 86	Omit dose

4. Third space fluids (ascites, pleural effusions): omit methotrexate

PRECAUTIONS:

- Neutropenia:** Fever or other evidence of infection must be assessed promptly and treated aggressively.
- 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. Susan Ellard or tumour group delegate at (604) 877-6000 or 1-800-663-3333 with any problems or questions regarding this treatment program.

Date activated: N/A
Date revised: 01 June 2011 (Infusion section revised)