

## Regimen Reference Order – BRST – FEC-D + trastuzumab

ARIA: BRST - [FEC - D + trastuzumab]

**Planned Course:** FEC-100 every 21 days for 3 cycles, followed by DOCEtaxel and trastuzumab every 21 days for 3 cycles, followed by trastuzumab every 21 days for 15 cycles

**Indication for Use:** Breast Cancer Adjuvant; HER2 positive

**CVAD:** Preferred (VESICANT INVOLVED)

### Proceed with treatment if:

#### Cycles 1 to 6

- ANC equal to or greater than  $1 \times 10^9/L$  AND Platelets equal to or greater than  $100 \times 10^9/L$

#### Cycle 7 (trastuzumab)

- Blood work at provider's discretion; not required to proceed with treatment
  - ❖ Contact Physician if parameters not met

**Note:** Hepatitis B serology results must be reviewed in accordance with CCMB Policy Hepatitis B Monitoring for Oncology and Hematology Patients

## SEQUENCE OF MEDICATION ADMINISTRATION

### Pre-treatment Requirements

Drug	Dose	CCMB Administration Guideline
<b>Cycles 1 to 3 – FEC</b>		
Instruct patient to start vigorous oral pre-hydration (600-900 mL) the morning of cyclophosphamide treatment (Self-administered at home)		
<b>Cycles 4 to 6 – DOCEtaxel and trastuzumab</b>		
dexamethasone	8 mg	Orally twice daily the day before DOCEtaxel treatment and one dose the morning of DOCEtaxel treatment (Self-administered at home) <i>*Nursing Alert: Notify physician if patient has not taken dexamethasone. dexamethasone is prescribed to prevent infusion reactions</i>

### Treatment Regimen – BRST – FEC-D + trastuzumab

Establish primary solution 500 mL of: normal saline		
Drug	Dose	CCMB Administration Guideline
<b>Cycles 1 to 3 – FEC</b>		
aprepitant	125 mg	Orally 1 hour pre-chemotherapy
dexamethasone	12 mg	Orally 30 minutes pre-chemotherapy
ondansetron	16 mg	Orally 30 minutes pre-chemotherapy

OLANzapine	2.5 mg	Orally 30 minutes pre-chemotherapy
epiRUBicin	100 mg/m <sup>2</sup>	IV Push over 10 to 15 minutes
fluorouracil	500 mg/m <sup>2</sup>	IV Push over 3 to 5 minutes
cyclophosphamide	500 mg/m <sup>2</sup>	IV in normal saline 250 mL over 1 hour
<b>Cycles 4 to 6 – DOCEtaxel and trastuzumab</b>		
<b>Drug</b>	<b>Dose</b>	<b>CCMB Administration Guideline</b>
trastuzumab (brand name specific)	<b>Cycle 4</b> 8 mg/kg Loading Dose	IV in normal saline 250 mL over 90 minutes <i>*Alert: Ensure brand name on prescription label (indicated in brackets on prescription label) matches prescribed order</i> <i>*Nursing Alert: DOCEtaxel infusion begins after observation period is complete</i>
	<b>Cycles 5 and 6</b> 6 mg/kg	IV in normal saline 250 mL over 30 minutes <i>*Alert: Ensure brand name on prescription label (indicated in brackets on prescription label) matches prescribed order</i>
DOCEtaxel	100 mg/m <sup>2</sup>	IV in normal saline 250 mL over 1 hour, following the administration rates below: <ul style="list-style-type: none"> <li>• Administer at 100 mL/hour for 15 minutes, then</li> <li>• Administer remaining volume over 45 minutes</li> </ul> <i>Use non-DEHP bags and non-DEHP administration sets</i> <b>OR</b> <b>For 500 mL bags</b> (when Pharmacy must prepare DOCEtaxel in 500 mL normal saline for concentration-dependent stability): IV in normal saline 500 mL over 1 hour, following the administration rates below: <ul style="list-style-type: none"> <li>• Administer at 200 mL/hour for 15 minutes, then</li> <li>• Administer remaining volume over 45 minutes</li> </ul> <i>Use non-DEHP bags and non-DEHP administration sets</i>
normal saline	100 mL	<b>ONLY</b> for patients with a PORT IV over 12 minutes <i>*Nursing Alert: This volume is to be administered after standard flush</i>
<b>Cycle 7 – trastuzumab every 21 days for 15 cycles</b>		
trastuzumab (brand name specific)	6 mg/kg	IV in normal saline 250 mL over 30 minutes every 21 days for 15 doses <i>*Alert: Ensure brand name on prescription label (indicated in brackets on prescription label) matches prescribed order</i>
All doses will be automatically rounded that fall within CCMB Approved Dose Bands. See Dose Banding document for more information		

**In the event of an infusion-related hypersensitivity reaction, refer to the 'Hypersensitivity Reaction Standing Order'**

## REQUIRED MONITORING

### Hepatitis B serology

- Hepatitis B surface antigen and Hepatitis B core antibody (drawn within preceding 5 years)

### Cardiac monitoring

- Left Ventricular Ejection Fraction (LVEF) monitoring recommended
  - During FEC treatment: At baseline and after Cycle 3 as per Physician Orders
  - During trastuzumab treatment: Every 4 cycles (i.e. 12 weeks) as per Physician Orders

### Cycles 1 to 6

- CBC, biochemistry and liver enzymes as per Physician Orders

### Cycle 4 Only

- Full vital signs (temperature, heart rate, respiratory rate, blood pressure and O<sub>2</sub> saturation) at baseline and as clinically indicated
- Observe patient for 30 minutes after trastuzumab infusion. Full vital signs after observation period is complete. DOCEtaxel infusion begins after observation period is complete
- No observation period required after DOCEtaxel administration. Patient can be discharged from treatment room if stable whether they had a reaction or not

### Cycles 5 and 6

- Full vital signs (temperature, heart rate, respiratory rate, blood pressure and O<sub>2</sub> saturation) at baseline and as clinically indicated
- No observation period required after trastuzumab or DOCEtaxel administration. Patient can be discharged from treatment room if stable whether they had a reaction or not

### Cycles 7 to 21

- Full vital signs (temperature, heart rate, respiratory rate, blood pressure and O<sub>2</sub> saturation) at baseline and as clinically indicated
- No observation period required after trastuzumab administration. Patient can be discharged from treatment room if stable whether they had a reaction or not

## Recommended Support Medications

Drug	Dose	CCMB Administration Guideline
<b>Cycles 1 to 3 – FEC</b>		
aprepitant	80 mg	Orally once daily on Days 2 and 3
dexamethasone	8 mg	Orally once daily on Days 2, 3 and 4
OLANzapine	2.5 mg	Orally the evening of Day 1 then twice daily on Days 2, 3 and 4. Also use OLANzapine 2.5 to 5 mg AS NEEDED for breakthrough nausea and vomiting (including Days 1 to 4) up to maximum of 10 mg per day. Contact clinic if nausea/vomiting is not adequately controlled
<b>Cycles 4 to 6 – DOCEtaxel and trastuzumab</b>		
pegfilgrastim (brand name specific) (See Filgrastim Clinical Guide)	6 mg	Subcutaneous once on Day 3 <i>*Alert: pegfilgrastim to be given as a single dose once per chemotherapy cycle no sooner than 24 hours after chemotherapy</i>
metoclopramide	10 – 20 mg	Orally every 4 hours as needed for nausea and vomiting

**Cycle 7 – trastuzumab**

None required

**DISCHARGE INSTRUCTIONS****Cycles 1 to 6**

- Instruct patient to continue taking anti-emetic(s) at home
- Reinforce applicable safe handling precautions of medications, blood and body fluids for 48 hours after completion of chemotherapy

**Cycles 1 to 3 (FEC)**

- Instruct patient to:
  - Continue taking anti-emetic(s) at home
  - Maintain oral intake of 2000 mL (8 glasses) of fluid daily at home
  - Empty bladder every 2 hours while awake and at bedtime for 24 hours
  - Obtain immediate assistance as per your clinic's contact instructions if:
    - Symptoms of hemorrhagic cystitis (e.g. dysuria, hematuria)
    - Unable to drink recommended amount of fluid

**Cycles 4 to 6 (DOCEtaxel and trastuzumab)**

- Patients should be instructed to contact their cancer team immediately if symptoms of hypersensitivity reactions occur after discharge
- Ensure patient receives pegfilgrastim supply if patient is self-administering at home

**Cycles 7 to 21 (trastuzumab)**

- Patients should be instructed to contact their cancer team immediately if symptoms of hypersensitivity reactions occur after discharge

**ADDITIONAL INFORMATION**

- Reassess trastuzumab dose with significant weight changes
- Due to the risk of reactivation of Hepatitis B virus (HBV) while on this treatment regimen, prescriber must adhere to CCMB Policy ***Hepatitis B Monitoring for Oncology and Hematology Patients*** for ordering and interpreting HBV serology and prescribing antiviral prophylaxis
- trastuzumab is available from more than one manufacturer and uses several different brand names. Brand name will be indicated in brackets after trastuzumab. **Ensure prescription label matches the brand name on prescribed order**
- **ARIA ordering: Note: At Cycle 6**, an entry called "***Physician Reminder - Order remaining trastuzumab 1 Units Insert Miscellaneous once***" will appear in the electronic drug order. No action is required. **This prompt is to remind the prescriber to order single agent trastuzumab which begins at Cycle 7**