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 x 10^9/L AND Platelets equal to or greater than 100 x 10^9/L***

Cycle 7 (trastuzumab)

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

SEQUENCE OF MEDICATION ADMINISTRATION

Pre-treatment Requirements

Drug	Dose	CCMB Administration Guideline
Cycles 1 to 3 – FEC		
Instruct patient to start vigorous oral pre-hydration (600-900 mL) the morning of cyclophosphamide treatment **(Self-administered at home)**		
Cycles 4 to 6 – DOCEtaxel		
dexamethasone	8 mg	Orally twice daily the day before DOCEtaxel treatment and one dose the morning of DOCEtaxel treatment **(Self-administered at home)**

Treatment Regimen – BRST – FEC-D + trastuzumab

Establish primary solution 500 mL of: normal saline

Drug	Dose	CCMB Administration Guideline
Cycles 1 to 3 – FEC		
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^2	IV Push over 10 to 15 minutes
fluorouracil	500 mg/m^2	IV Push over 3 to 5 minutes
cyclophosphamide	500 mg/m^2	IV in normal saline 250 mL over 1 hour

Cycles 4 to 6 – DOCEtaxel and trastuzumab		
Drug	**Dose**	**CCMB Administration Guideline**
trastuzumab (brand name specific)	**Cycle 4** 8 mg/kg Loading Dose	IV in normal saline 250 mL over 90 minutes **Alert: Ensure brand name on prescription label (indicated in brackets on prescription label) matches prescribed order* **Nursing Alert: DOCEtaxel infusion begins after observation period is complete*
	Cycles 5 and 6 6 mg/kg	IV in normal saline 250 mL over 30 minutes **Alert: Ensure brand name on prescription label (indicated in brackets on prescription label) matches prescribed order*
DOCEtaxel	100 mg/m^2	IV in normal saline 250 mL over 1 hour *Use non-DEHP bags and non-DEHP administration sets*
normal saline	100 mL	**ONLY** for patients with a PORT IV over 12 minutes **Nursing Alert: This volume is to be administered after standard flush*
Cycle 7 – trastuzumab		
trastuzumab (brand name specific)	6 mg/kg	IV in normal saline 250 mL over 30 minutes every 21 days for 15 doses **Alert: Ensure brand name on prescription label (indicated in brackets on prescription label) matches prescribed order*
All doses will be automatically rounded that fall within the DSG Approved Dose Bands. See BRST DSG – Dose Banding document for more information		

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

REQUIRED MONITORING

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 doses (i.e. 12 weeks) for up to 2 years 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_2 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_2 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

Cycle 7 and Onwards

- Full vital signs (temperature, heart rate, respiratory rate, blood pressure and O_2 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
Cycles 1 to 3 – FEC		
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
Cycles 4 to 6 – DOCEtaxel		
Drug	**Dose**	**CCMB Administration Guideline**
metoclopramide	10 – 20 mg	Orally every 4 hours as needed for nausea and vomiting
Cycle 7 – trastuzumab		
None required		

DISCHARGE INSTRUCTIONS

Phase 1

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)

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

Cycle 7 (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
- 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**
- **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**