

Regimen Reference Order – BRST– TC + trastuzumab

ARIA: BRST - [TC + trastuzumab]

Planned Course: TC + trastuzumab every 21 days for 4 cycles, followed by trastuzumab every 21 days for 14 cycles

Indication for Use: Breast Cancer Adjuvant; HER2 positive

CVAD: At provider's discretion

Proceed with treatment if:

Cycles 1 to 4

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

Cycle 5 (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 4 – TC and trastuzumab		
Instruct patient to start vigorous oral pre-hydration (600-900 mL) the morning of cyclophosphamide treatment (Self-administered at home)		
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 – TC + trastuzumab

Establish primary solution 500 mL of: normal saline		
Drug	Dose	CCMB Administration Guideline
Cycles 1 to 4 – TC and trastuzumab		
trastuzumab (brand name specific)	Cycle 1 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>
	Cycles 2 to 4 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>
ondansetron	16 mg	Orally 30 minutes pre-chemotherapy

dexamethasone	4 mg	Orally 30 minutes pre-chemotherapy <i>*Nursing Alert: this dose is in addition to the 8 mg self-administered dose taken at home morning of Day 1</i>
DOCEtaxel	75 mg/m ²	IV in normal saline 250 mL over 1 hour, following the administration rates below: Administer at 100 mL/hour for 15 minutes, then <ul style="list-style-type: none"> Administer at 100 mL/hour for 15 minutes, then Administer remaining volume over 45 minutes <i>Use non-DEHP bags and non-DEHP administration sets</i> OR For 500 mL bags (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"> Administer at 200 mL/hour for 15 minutes, then Administer remaining volume over 45 minutes <i>Use non-DEHP bags and non-DEHP administration sets</i>
normal saline	100 mL	ONLY for patients with a PORT IV over 12 minutes <i>*Nursing Alert: This volume is to be administered after standard flush</i>
cyclophosphamide	600 mg/m ²	IV in normal saline 250 mL over 1 hour
Cycle 5 – trastuzumab every 21 days for 14 cycles		
trastuzumab (brand name specific)	6 mg/kg	IV in normal saline 250 mL over 30 minutes every 21 days for 14 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

Cardiac monitoring

- Left Ventricular Ejection Fraction (LVEF) at baseline and every 4 cycles (i.e. 12 weeks) as per Physician Orders

Cycles 1 to 4

- CBC, biochemistry and liver enzymes as per Physician Orders

Cycle 1 Only

- Full vital signs (temperature, heart rate, respiratory rate, blood pressure and O₂ 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 2 to 4

- Full vital signs (temperature, heart rate, respiratory rate, blood pressure and O₂ 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 5 to 18

- Full vital signs (temperature, heart rate, respiratory rate, blood pressure and O₂ 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 4 ONLY – TC and trastuzumab		
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>
dexamethasone	8 mg	Orally once daily on Days 2 and 3
metoclopramide	10-20 mg	Orally every 4 hours as needed for nausea and vomiting
Cycle 5 – trastuzumab		
None required		

DISCHARGE INSTRUCTIONS

All Cycles

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

Cycles 1 to 4 (TC and trastuzumab)

- Ensure patient receives pegfilgrastim supply if patient is self-administering at home
- 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
- Reinforce applicable safe handling precautions of medications, blood and body fluids for 48 hours after completion of chemotherapy

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 4**, 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 5**