Regimen Reference Order

BRST – trastuzumab + capecitabine + tucatinib

ARIA: BRST - [tras + cape + tucatinib]

Planned Course: **Until disease progression or unacceptable toxicity (1 cycle = 21 days)**
Indication for Use: **Breast Cancer Metastatic HER2 positive**

CVAD: At Provider's Discretion

Proceed with treatment if:

Day 1

- ***ANC equal to or greater than 1.2 x 10^9/L AND Platelets equal to or greater than 100 x 10^9/L***
- ***Creatinine clearance greater than 30 mL/minute***
  - ❖ **Contact Physician if parameters not met**

SEQUENCE OF MEDICATION ADMINISTRATION

Pre-treatment Requirements

Drug	Dose	CCMB Administration Guideline
Not Applicable		

Treatment Regimen – BRST – trastuzumab + capecitabine + tucatinib

Establish primary solution 500 mL of: normal saline

Drug	Dose	CCMB Administration Guideline
trastuzumab (brand name specific)	**Cycle 1:** 8 mg/kg Loading Dose	IV in normal saline 250 mL over 90 minutes **on Day 1** **Alert: Ensure brand name on prescription label (indicated in brackets on prescription label) matches prescribed order*
	Cycle 2 and Onwards: 6 mg/kg	IV in normal saline 250 mL over 30 minutes **on Day 1** **Alert: Ensure brand name on prescription label (indicated in brackets on prescription label) matches prescribed order*
capecitabine	1000 mg/m^2	Orally twice daily on **Days 1 to 14**, followed by 7 days off Take with food. Swallow whole **(Self-administered at home)**
tucatinib	300 mg	Orally twice daily on **Days 1 to 21** Take with or without food. Swallow whole **(Self-administered at home)**

capecitabine (XELODA®) available dosage strengths: 150 mg and 500 mg tablets
Classification: Cytotoxic, Hazardous

tucatinib (TUKYSA®) available dosage strengths: 50 mg and 150 mg tablets
Classification: Cytotoxic, Hazardous

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) monitoring is recommended:
  - At baseline (if not already completed within 3 months of starting treatment), and
  - every 4 cycles for the first 2 years, then
  - every 4 to 8 cycles thereafter

All Cycles

Day 1

- CBC, serum creatinine, urea, electrolytes, liver enzymes and total bilirubin as per Physician Orders

Cycle 1 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

Cycle 2 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
loperamide	2 – 4 mg	Orally as directed below
metoclopramide	10 – 20 mg	Orally every 4 hours as needed for nausea and vomiting

DISCHARGE INSTRUCTIONS

- Patients should be instructed to contact their cancer team immediately if symptoms of hypersensitivity reactions occur after discharge
- Patients should have an anti-diarrheal medication (i.e. loperamide) at home as this regimen is associated with a high risk of diarrhea
- Patients should take loperamide 4 mg (two 2 mg tablets) if they have a loose bowel movement then 2 mg (1 tablet) every 4 hours as needed
- If diarrhea has not stopped despite taking **8 tablets (16 mg) of loperamide over a 24-hour period,** please contact your clinic for further instructions
- tucatinib has potential for drug-drug interactions. Patients should notify clinic prior to starting any new medication
- Instruct patient to continue taking anti-emetic(s) at home
- tucatinib is dispensed with a 30-day supply and is kept in the original container. The desiccant should not be removed and any unused tablets should be discarded 3 months after opening the bottle
- Reinforce applicable safe handling precautions of medications, blood and body fluids for 48 hours after completion of chemotherapy

ADDITIONAL INFORMATION

- 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**
- tucatinib and capecitabine can cause diarrhea, hand-foot syndrome and neuropathy
- tucatinib may increase serum creatinine without affecting glomerular filtration. If serum creatinine is persistently elevated, 24-hour urine collection may be indicated to evaluate renal function