ADULT Updated: June 14, 2023

Regimen Reference Order

BRST - PERTuzumab + trastuzumab + DOCEtaxel

ARIA: BRST - [PERTuz+tras+DOCEtaxel]
BRST - [PERTuz + tras - Phase 2]

Planned Course: Phase 1: PERTuzumab + trastuzumab + DOCEtaxel every 21 days for 6 to 8 cycles,

followed by:

Phase 2: PERTuzumab + trastuzumab every 21 days until disease progression or

unacceptable toxicity

Indication for use: Breast Cancer Metastatic HER2 positive

CVAD: At Provider's Discretion

Proceed with treatment if:

PERTuzumab + trastuzumab + DOCEtaxel (Phase 1)

• ANC equal to or greater than 1.5 x $10^9/L$ AND Platelets equal to or greater than $100 \times 10^9/L$ PERTuzumab + trastuzumab (Phase 2)

- 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		
dexamethasone	8 mg	Orally twice daily the day before DOCEtaxel treatment and one dose the morning of DOCEtaxel treatment (Self-administered at home)		
		*Nursing Alert: Notify physician if patient has not taken dexamethasone. dexamethasone is prescribed to prevent infusion reactions		

Treatment Regimen: BRST – PERTuzumab + trastuzumab + DOCEtaxel

Establish primary solution 500 mL of: normal saline					
Drug	Dose	CCMB Administration Guideline			
Phase 1 – PERTuzumab + trastuzumab + DOCEtaxel (1 cycle = 21 days)					
Cycle 1					
Day 1					
PERTuzumab	840 mg Loading Dose	IV in normal saline 250 mL over 1 hour			
Day 2					
trastuzumab (brand name specific)	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
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
		 Administer remaining volume over 45 minutes
		Use non-DEHP bags and non-DEHP administration sets 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:
		 Administer at 200 mL/hour for 15 minutes, then
		 Administer remaining volume over 45 minutes
		Use non-DEHP bags and non-DEHP administration setsUse non-DEHI 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
Cycles 2 to 8		
PERTuzumab	420 mg	IV in normal saline 250 mL over 30 minutes
trastuzumab (brand name	6 mg/kg	IV in normal saline 250 mL over 30 minutes
specific)		*Alert: Ensure brand name on prescription label (indicated in brackets on prescription label) matches prescribed order
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
		Administer remaining volume over 45 minutes
		Use non-DEHP bags and non-DEHP administration sets 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:
		Administer at 200 mL/hour for 15 minutes, then
		Administer remaining volume over 45 minutes
		Use non-DEHP bags and non-DEHP administration setsUse 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



PERTuzumab	420 mg	IV in normal saline 250 mL over 30 minutes on Days 1, 22, 43 and 64
trastuzumab (brand name specific)	6 mg/kg	IV in normal saline 250 mL over 30 minutes on Days 1, 22, 43 and 64 *Alert: Ensure brand name on prescription label (indicated in brackets on prescription label) matches prescribed order

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

REQUIRED MONITORING

PERTuzumab + trastuzumab + DOCEtaxel (Phase 1)

All Cycles

• CBC, biochemistry and liver enzymes as per Physician Orders

Cycle 1, Day 1

- Full vital signs (temperature, heart rate, respiratory rate, blood pressure and O₂ saturation) at baseline and as clinically indicated
- Observe patient for 1 hour after PERTuzumab administration. Full vital signs prior to discharge

Cycle 1, Day 2

- 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 administration. DOCEtaxel infusion begins after observation period is complete
- No observation period is required after DOCEtaxel administration. Patient can be discharged from treatment room if stable whether they had a reaction or not

Cycle 2 and Onwards

- Full vital signs (temperature, heart rate, respiratory rate, blood pressure and O₂ saturation) at baseline and as clinically indicated
- No observation period is required after PERTuzumab, trastuzumab or DOCEtaxel administration. Patient can be discharged from treatment room if stable whether they had a reaction or not

PERTuzumab + trastuzumab (Phase 2)

Cardiac monitoring

- Left Ventricular Ejection Fraction (LVEF) monitoring recommended:
 - o At baseline, and
 - o every 3 months for the first 2 years, then
 - o every 3 to 6 months thereafter

All Cycles

- Full vital signs (temperature, heart rate, respiratory rate, blood pressure and O₂ saturation) at baseline and as clinically indicated
- No observation period is required after PERTuzumab or 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				
PERTuzumab + trastuzumab + DOCEtaxel (Phase 1)						
metoclopramide	10 – 20 mg	Orally every 4 hours as needed for nausea and vomiting				

DISCHARGE INSTRUCTIONS

All Cycles

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

PERTuzumab + trastuzumab + DOCEtaxel (Phase 1)

- 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

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**
- After completion of DOCEtaxel, patients can continue on PERTuzumab plus trastuzumab alone; prescribers will use the BRST [PERTuz + tras Phase 2] regimen when DOCEtaxel is complete

