Regimen Reference Order

BRST – PERTuzumab + trastuzumab + PACLitaxel

ARIA: BRST - [PERTuz+tras+PACL (weekly)]

BRST - [PERTuz + tras - Phase 2]

Planned Course: **Phase 1: PERTuzumab + trastuzumab + PACLitaxel every 21 days for 6 to 8 cycles (*greater than 8 cycles at the discretion of the oncologist*), 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 + PACLitaxel (Phase 1)

Days 1, 8 and 15

- ***ANC equal to or greater than 1.5 x 10^9/L AND Platelets equal to or greater than 100 x 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
Not Applicable		

Treatment Regimen – BRST – PERTuzumab + trastuzumab + PACLitaxel

Establish primary solution 500 mL of: normal saline

Drug	Dose	CCMB Administration Guideline
Phase 1 – PERTuzumab + trastuzumab + PACLitaxel (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: PACLitaxel infusion begins after observation period is complete*

cetirizine	20 mg	Orally 1 hour prior to PACLitaxel
dexamethasone	20 mg	IV in normal saline 50 mL over 15 minutes **1 hour** prior to PACLitaxel **Nursing Alert: PACLitaxel starts **1 hour after completion** of dexamethasone infusion*
Wait 1 hour after completion of IV pre-medication(s) before starting PACLitaxel		
PACLitaxel	80 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 with 0.2 or 0.22 micron filter* **Nursing Alert: Gently invert bag 8 to 10 times immediately prior to administration of PACLitaxel to evenly distribute the drug*
Days 8 and 15		
cetirizine	20 mg	Orally 1 hour prior to PACLitaxel
dexamethasone	20 mg	IV in normal saline 50 mL over 15 minutes **1 hour** prior to PACLitaxel **Nursing Alert: PACLitaxel starts **1 hour after completion** of dexamethasone infusion*
Wait 1 hour after completion of IV pre-medication(s) before starting PACLitaxel		
PACLitaxel	80 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 with 0.2 or 0.22 micron filter* **Nursing Alert: Gently invert bag 8 to 10 times immediately prior to administration of PACLitaxel to evenly distribute the drug*
Cycles 2 to 8		
Day 1		
PERTuzumab	420 mg	IV in normal saline 250 mL over 30 minutes
trastuzumab (brand name specific)	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*
cetirizine	20 mg	Orally 1 hour prior to PACLitaxel
dexamethasone	20 mg	IV in normal saline 50 mL over 15 minutes **1 hour** prior to PACLitaxel **Nursing Alert: PACLitaxel starts **1 hour after completion** of dexamethasone infusion*
Wait 1 hour after completion of IV pre-medication(s) before starting PACLitaxel		
PACLitaxel	80 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 with 0.2 or 0.22 micron filter **Nursing Alert:* *Gently invert bag 8 to 10 times immediately prior to administration of PACLitaxel to evenly distribute the drug*
Days 8 and 15		
cetirizine	20 mg	Orally 1 hour prior to PACLitaxel
dexamethasone	20 mg	IV in normal saline 50 mL over 15 minutes **1 hour** prior to PACLitaxel **Nursing Alert:* *PACLitaxel starts **1 hour after completion** of dexamethasone infusion*
Wait 1 hour after completion of IV pre-medication(s) before starting PACLitaxel		
PACLitaxel	80 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 with 0.2 or 0.22 micron filter* **Nursing Alert:* *Gently invert bag 8 to 10 times immediately prior to administration of PACLitaxel to evenly distribute the drug*
Phase 2 PERTuzumab + trastuzumab (1 cycle = 84 days)		
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*
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

PERTuzumab + trastuzumab + PACLitaxel (Phase 1)

All Cycles

Day 1

- CBC, biochemistry and liver enzymes as per Physician Orders

Days 8 and 15

- CBC

Cycle 1, Day 1

- Full vital signs (temperature, heart rate, respiratory rate, blood pressure and O_2 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 O_2 saturation) at baseline and as clinically indicated
- Observe patient for 30 minutes after trastuzumab administration. PACLitaxel infusion begins after observation period is complete
- No observation period is required after PACLitaxel 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 O_2 saturation) at baseline and as clinically indicated
- No observation period is required after PERTuzumab, trastuzumab or PACLitaxel 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:
  - At baseline, and
  - every 3 months for the first 2 years, then
  - every 3 to 6 months thereafter

All Cycles

- Full vital signs (temperature, heart rate, respiratory rate, blood pressure and O_2 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 + PACLitaxel (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 + PACLitaxel (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

- PACLitaxel may cause progressive, irreversible neuropathy
- 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 PACLitaxel, patients can continue on PERTuzumab plus trastuzumab alone; prescribers will use the **BRST - [PERTuz + tras - Phase 2]** regimen when PACLitaxel is complete