

# Regimen Reference Order – BRST – PACLitaxel + trastuzumab

ARIA: BRST - [PACLitaxel + tras (ADJ)]

**Planned Course:** PACLitaxel and trastuzumab every week for 12 weeks (1 cycle = 21 days), 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 (PACLitaxel + trastuzumab)**

- **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 every 21 days)**

- **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 – PACLitaxel + trastuzumab

Establish primary solution 500 mL of: normal saline

Drug	Dose	CCMB Administration Guideline
<b>Cycle 1</b>		
<b>Day 1</b>		
trastuzumab (brand name specific)	4 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: PACLitaxel infusion begins after observation period is complete</i>
cetirizine	20 mg	Orally 1 hour prior to PACLitaxel
dexamethasone	20 mg	IV in normal saline 50 mL over 15 minutes <b>1 hour</b> prior to PACLitaxel <i>*Nursing Alert: PACLitaxel starts 1 hour after completion of dexamethasone infusion</i>
<b>Wait 1 hour after completion of IV pre-medication(s) before starting PACLitaxel</b>		
PACLitaxel	80 mg/m <sup>2</sup>	IV in normal saline 250 mL over 1 hour, following the administration rates below: <ul style="list-style-type: none"> <li>• Administer at 100 mL/hour for 15 minutes, then</li> <li>• Administer remaining volume over 45 minutes</li> </ul>

		<p>Use non-DEHP bags and non-DEHP administration sets with 0.2 or 0.22 micron filter</p> <p><b>*Nursing Alert:</b> Gently invert bag 8 to 10 times immediately prior to administration of PACLitaxel to evenly distribute the drug</p>
<b>Days 8 and 15</b>		
trastuzumab (brand name specific)	2 mg/kg	<p>IV in normal saline 250 mL over 30 minutes</p> <p><b>*Alert:</b> Ensure brand name on prescription label (indicated in brackets on prescription label) matches prescribed order</p>
cetirizine	20 mg	Orally 1 hour prior to PACLitaxel
dexamethasone	20 mg	<p>IV in normal saline 50 mL over 15 minutes <b>1 hour</b> prior to PACLitaxel</p> <p><b>*Nursing Alert:</b> PACLitaxel starts <b>1 hour after completion</b> of dexamethasone infusion</p>
<b>Wait 1 hour after completion of IV pre-medication(s) before starting PACLitaxel</b>		
PACLitaxel	80 mg/m <sup>2</sup>	<p>IV in normal saline 250 mL over 1 hour, following the administration rates below:</p> <ul style="list-style-type: none"> <li>Administer at 100 mL/hour for 15 minutes, then</li> <li>Administer remaining volume over 45 minutes</li> </ul> <p>Use non-DEHP bags and non-DEHP administration sets with 0.2 or 0.22 micron filter</p> <p><b>*Nursing Alert:</b> Gently invert bag 8 to 10 times immediately prior to administration of PACLitaxel to evenly distribute the drug</p>
<b>Cycles 2 to 4</b>		
<b>Days 1, 8 and 15</b>		
trastuzumab (brand name specific)	2 mg/kg	<p>IV in normal saline 250 mL over 30 minutes</p> <p><b>*Alert:</b> Ensure brand name on prescription label (indicated in brackets on prescription label) matches prescribed order</p>
cetirizine	20 mg	Orally 1 hour prior to PACLitaxel
dexamethasone	20 mg	<p>IV in normal saline 50 mL over 15 minutes <b>1 hour</b> prior to PACLitaxel</p> <p><b>*Nursing Alert:</b> PACLitaxel starts <b>1 hour after completion</b> of dexamethasone infusion</p>
<b>Wait 1 hour after completion of IV pre-medication(s) before starting PACLitaxel</b>		
PACLitaxel	80 mg/m <sup>2</sup>	<p>IV in normal saline 250 mL over 1 hour, following the administration rates below:</p> <ul style="list-style-type: none"> <li>Administer at 100 mL/hour for 15 minutes, then</li> <li>Administer remaining volume over 45 minutes</li> </ul> <p>Use non-DEHP bags and non-DEHP administration sets with 0.2 or 0.22 micron filter</p> <p><b>*Nursing Alert:</b> Gently invert bag 8 to 10 times immediately prior to administration of PACLitaxel to evenly distribute the drug</p>

Cycle 5 – trastuzumab every 21 days		
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) monitoring is recommended at baseline and every 3 months

### Cycle 1

#### Day 1

- CBC, biochemistry and liver enzymes as per Physician Orders
- Full vital signs (temperature, heart rate, respiratory rate, blood pressure and O<sub>2</sub> saturation) at baseline and as clinically indicated
- Observe patient for 30 minutes after administration of trastuzumab (first dose). Full vital signs after observation period is complete. PACLitaxel infusion begins after observation period is complete
- No observation period required after PACLitaxel administration. Patient can be discharged from treatment room if stable whether they had a reaction or not

#### Days 8 and 15

- CBC as per Physician Orders
- Full vital signs (temperature, heart rate, respiratory rate, blood pressure and O<sub>2</sub> saturation) at baseline and as clinically indicated
- No observation period required after trastuzumab or PACLitaxel administration. Patient can be discharged from treatment room if stable whether they had a reaction or not

### Cycles 2 to 4

#### Day 1

- CBC, biochemistry and liver enzymes as per Physician Orders
- Full vital signs (temperature, heart rate, respiratory rate, blood pressure and O<sub>2</sub> saturation) at baseline and as clinically indicated
- No observation period required after trastuzumab or PACLitaxel administration. Patient can be discharged from treatment room if stable whether they had a reaction or not

#### Days 8 and 15

- CBC as per Physician Orders
- Full vital signs (temperature, heart rate, respiratory rate, blood pressure and O<sub>2</sub> saturation) at baseline and as clinically indicated
- No observation period required after trastuzumab or PACLitaxel administration. Patient can be discharged from treatment room if stable whether they had a reaction or not

### Cycle 5 (trastuzumab every 21 days)

- Full vital signs (temperature, heart rate, respiratory rate, blood pressure and O<sub>2</sub> 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
<b>Cycles 1 to 4 ONLY – PACLitaxel + trastuzumab</b>		
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

#### Cycles 1 to 4 (PACLitaxel + trastuzumab)

- 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
- 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**
- Note:** Cycle 5 begins 7 days after Cycle 4, Day 15