BC Cancer Protocol Summary for Palliative Therapy for Metastatic Breast Cancer using PACLitaxel

Protocol Code:  BRAVTAX
Tumour Group:  Breast
Contact Physician:  Dr. Karen Gelmon

ELIGIBILITY:
- First, second, or third line treatment of metastatic breast cancer patients with ECOG performance status 0, 1, or 2, and greater than 3 month life expectancy
- For more than 6 cycles, a BC Cancer “Compassionate Access Program” request must be approved.

TESTS:
- Baseline: CBC & diff, platelets, bilirubin, ALT
- Before each treatment: CBC & diff, platelets
- If clinically indicated: bilirubin & ALT

PREMEDICATIONS:
- PACLitaxel must not be started unless the following drugs have been given:
  - 45 minutes prior to PACLitaxel:
    - dexamethasone 20 mg IV in NS 50 mL over 15 minutes
  - 30 minutes prior to PACLitaxel:
    - diphenhydrAMINE 50 mg IV and ranitidine 50 mg IV in NS 50 mL over 20 minutes (compatible up to 3 hours when mixed in bag)
- Additional antiemetics not usually required.

TREATMENT:

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose</th>
<th>BC Cancer Administration Guideline</th>
</tr>
</thead>
<tbody>
<tr>
<td>PACLitaxel</td>
<td>175 mg/m²</td>
<td>IV in NS <strong>250 to 500</strong> mL over 3 hours (use non-DEHP bag and non-DEHP tubing with 0.22 micron or smaller in-line filter)</td>
</tr>
</tbody>
</table>

- Repeat every 21 days x 6 cycles.
- **Discontinue** if no response after 2 cycles.
DOSE MODIFICATIONS:

1. Hematological

<table>
<thead>
<tr>
<th>ANC (x 10^9/L)</th>
<th>Platelets (x 10^9/L)</th>
<th>Dose (mg/m^2)</th>
<th>Dose after Neutropenic Sepsis on PACLitaxel</th>
</tr>
</thead>
<tbody>
<tr>
<td>greater than or equal to 1.5 and greater than or equal to 90</td>
<td>175 mg/m^2</td>
<td>135 mg/m^2</td>
<td></td>
</tr>
<tr>
<td>1.0 to less than 1.5 or 70 to less than 90</td>
<td>135 mg/m^2</td>
<td>135 mg/m^2</td>
<td></td>
</tr>
<tr>
<td>less than 1.0 or less than 70</td>
<td>delay</td>
<td>delay</td>
<td></td>
</tr>
</tbody>
</table>

2. Hepatic Dysfunction

<table>
<thead>
<tr>
<th>Bilirubin (micromol/L)</th>
<th>ALT</th>
<th>Dose (mg/m^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than or equal to 25 and less than 2 x ULN</td>
<td>175 mg/m^2</td>
<td></td>
</tr>
<tr>
<td>less than or equal to 25 and greater than or equal to 2 x ULN with no liver metastases or greater than or equal to 5 x ULN with liver metastases</td>
<td>135 mg/m^2</td>
<td></td>
</tr>
<tr>
<td>25 to 50</td>
<td>75 mg/m^2</td>
<td></td>
</tr>
<tr>
<td>greater than 50</td>
<td>50 mg/m^2</td>
<td></td>
</tr>
</tbody>
</table>

ULN = upper limit of normal

3. Arthralgia and/or myalgia: If arthralgia and/or myalgia of grade 2 (moderate) or higher is not relieved by adequate doses of NSAIDs or acetaminophen with codeine (e.g., TYLENOL #3®), a limited number of studies report a possible therapeutic benefit using:
- predniSONE 10 mg po bid x 5 days starting 24 hours post-PACLitaxel
- gabapentin 300 mg po on day before chemotherapy, 300 mg bid on treatment day, then 300 mg tid x 7 to 10 days
If arthralgia and/or myalgia persist, reduce subsequent PACLitaxel doses to 135 mg/m^2.

4. Neuropathy: Dose modification or discontinuation may be required (see BC Cancer Drug Manual).
PRECAUTIONS:

1. **Hypersensitivity**: Reactions to PACLitaxel are common. See BC Cancer Hypersensitivity Guidelines.

| Mild symptoms (e.g. mild flushing, rash, pruritus) | ▪ complete PACLitaxel infusion. Supervise at bedside  
▪ no treatment required |
|---------------------------------------------------|-----------------------------------------------------------------|
| **Moderate** symptoms (e.g. moderate rash, flushing, mild dyspnea, chest discomfort, mild hypotension) | ▪ stop PACLitaxel infusion  
▪ give IV diphenhydramINE 25 to 50 mg and Hydrocortisone IV 100 mg  
▪ after recovery of symptoms resume PACLitaxel infusion at 20 mL/h for 5 minutes, 30 mL/h for 5 minutes, 40 mL/h for 5 minutes, then 60 mL/h for 5 minutes. If no reaction, increase to full rate.  
▪ if reaction recurs, discontinue PACLitaxel therapy |
| **Severe** symptoms (i.e. one or more of respiratory distress requiring treatment, generalised urticaria, angioedema, hypotension requiring therapy) | ▪ stop PACLitaxel infusion  
▪ give IV antihistamine and steroid as above. Add epinephrine or bronchodilators if indicated  
▪ discontinue PACLitaxel therapy |

2. **Extravasation**: PACLitaxel causes pain and tissue necrosis if extravasated. Refer to BC Cancer Extravasation Guidelines.

3. **Neutropenia**: Fever or other evidence of infection must be assessed promptly and treated aggressively.

Call Dr. Karen Gelmon or tumour group delegate at (604) 877-6000 or 1-800-663-3333 with any problems or questions regarding this treatment program.