

BCCA Protocol Summary for Palliative Therapy for Metastatic Breast Cancer using PACLitaxel-NAB (ABRAXANE®)

Protocol Code:

BRAVABR

Tumour Group:

Breast

Contact Physician:

Dr. Stephen Chia

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
- Adequate hematological parameters (ANC greater than or equal to $1.5 \times 10^9/L$ and platelets greater than or equal to $100 \times 10^9/L$)
- Adequate renal and hepatic function
- Class II form must be completed. To continue beyond 8 cycles, a BCCA "Compassionate Access Program" request must be approved.

EXCLUSIONS:

- patients who have progressed on prior taxane therapy
- pregnancy or lactation
- severe hepatic dysfunction contraindicating PACLitaxel-NAB
- greater than or equal to grade 2 sensory or motor neuropathy

TESTS:

- Baseline: CBC & diff, platelets, bilirubin, liver enzymes, creatinine
- Before each treatment: CBC & diff, platelets
- If clinically indicated: bilirubin, liver enzymes, creatinine

PREMEDICATIONS:

- Additional anti-emetics not usually required.

TREATMENT:

Drug	Dose	BCCA Administration Guideline
PACLitaxel-NAB (ABRAXANE®)	260 mg/m ²	IV over 30 minutes*

*in empty sterile bags and tubing with 15 micron filter; no specific material required for bag or tubing

Repeat every 21 days x 6 cycles. Discontinue if no response after 2 cycles. If patient still receiving benefit after 6 cycles, further 2 cycles may be given.

DOSE MODIFICATIONS:

1. Hematological

ANC ($\times 10^9/L$)		Platelets ($\times 10^9/L$)	Dose
greater than or equal to 1.5	and	greater than or equal to 100	100% (260 mg/m^2)
1 to 1.49	and	greater than or equal to 100	220 mg/m^2
less than 1	or	less than 100	Delay until ANC greater than or equal to 1.5 and platelets greater than or equal to 100 then consider giving 220 mg/m^2

	1 st Occurrence	2 nd Occurrence
Febrile Neutropenia	Delay until recovery (ANC greater than or equal to $1.5 \times 10^9/L$ and plts greater than or equal to $100 \times 10^9/L$), then dose reduce to 220 mg/m^2 **	Delay until recovery (ANC greater than or equal to $1.5 \times 10^9/L$ and plts greater than or equal to $100 \times 10^9/L$), then dose reduce to 180 mg/m^2 **

**Dose reductions should be maintained for subsequent cycles and not re-escalated

2. Sensory Neuropathy

Grade	Toxicity	Dose – 1 st Occurrence	Dose – 2 nd Occurrence
1	Asymptomatic; loss of deep tendon reflexes or paresthesia (including tingling) but not interfering with function	Maintain dose	Maintain dose
2	Sensory alteration or paresthesia (including tingling) but not interfering with function, but not interfering with ADL	Maintain dose	Maintain dose
3	Sensory alteration or paresthesia interfering with ADL	Hold treatment until resolved to grade 2, then reduce dose to 220 mg/m^2 **	Hold treatment until resolved to grade 2, then reduce dose to 180 mg/m^2 **
4	Disabling	Hold treatment until resolved to grade 2, then reduce dose to 220 mg/m^2 **	Hold treatment until resolved to grade 2, then reduce dose to 180 mg/m^2 ** or discontinue further therapy

**Dose reductions should be maintained for subsequent cycles and not re-escalated.

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-NAB
 - 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-NAB doses to 220 mg/m².

PRECAUTIONS:

1. An albumin form of PACLitaxel may substantially affect a drug's functional properties relative to those of drug in solution. **Do not** substitute with or for other PACLitaxel formulations.
2. **Extravasation**: Nab-PACLitaxel causes pain and tissue necrosis if extravasated. Refer to BCCA Extravasation Guidelines.
3. **Neutropenia**: Fever or other evidence of infection must be assessed promptly and treated aggressively.
4. **Hepatic Dysfunction**. PACLitaxel-NAB has not been studied in patient with bilirubin greater than 25 micromol/L
5. **Renal Dysfunction**. PACLitaxel-NAB has not been studied in patients with serum creatinine greater than 177 micromol/L
6. PACLitaxel-NAB is metabolized by CYP2C8 and CYP3A4; caution should be exercised when administering with drugs which are CYP2C8 or CYP3A4 inducers or inhibitors.
7. Cardiac toxicity has been reported rarely while patients receive PACLitaxel-NAB. Severe cardiovascular events (3%), including chest pain, cardiac arrest, supraventricular tachycardia, edema, thrombosis, pulmonary thromboembolism, pulmonary emboli, and hypertension.
8. Theoretical risk of viral disease transmission, due to human albumin component, is extremely remote.

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

Date Activated: 01 Nov 2007 (as UBRAVBR)

Date Revised: 1 Oct 2016 (Administrative device clarified)

References:

1. Gradishar WJ, et al. Phase III Trial of nanoparticle albumin-bound paclitaxel compared with polyethylated castor oil-based paclitaxel in women with breast cancer J Clin Oncol 2005;23:7794-7803
2. Abraxis Oncology. ABRAXANE® product monograph. Richmond Hill, Ontario; 26 June 2006.