



National  
Comprehensive  
Cancer  
Network®

BRS6a

NCCN Templates®

**Breast Cancer**

**AC (DOXOrubicin/Cyclophosphamide) Every 21 Days  
followed by PACLitaxel Weekly**

**AC (DOXOrubicin/Cyclophosphamide) Every 21  
Days Course**

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#### INDICATION:

Adjuvant

#### REFERENCES:

1. [NCCN Clinical Practice Guidelines in Oncology™ Breast Cancer. V.2.2012.](#)
2. [Romond EH, et al. \*N Engl J Med.\* 2005;353\(16\):1673-84.<sup>b</sup>](#)

#### NCCN SUPPORTIVE CARE:

1. *Emetic Risk*: Day 1 High
2. *Fever Neutropenia Risk*: Intermediate

#### CHEMOTHERAPY REGIMEN

21-day cycle for 4 cycles

- **DOXOrubicin** 60 mg/m<sup>2</sup> IV Push on Day 1
- See *Safety Parameters and Special Instructions* for information on slow IV Push administration.
- **Cyclophosphamide** 600 mg/m<sup>2</sup> IV over 30 minutes on Day 1
- Oral hydration is strongly encouraged with cyclophosphamide; poorly hydrated patients may need supplemental IV hydration. Patients should attain combined oral and IV hydration of 2 – 3 L/day on day of chemotherapy. See *Other Supportive Therapy* for example of IV hydration.

**This course is 4 cycles of AC (DOXOrubicin/cyclophosphamide) Every 21 Days.**

**PACLitaxel Weekly is initiated following completion of this course.**

**Please see Order Template BRS6b for PACLitaxel Weekly course.**

#### SUPPORTIVE CARE

**Antiemetic therapy (See [www.nccn.org/professionals/physician\\_gls/PDF/antiemesis.pdf](http://www.nccn.org/professionals/physician_gls/PDF/antiemesis.pdf))**

Days 1 – 4

- 5-HT<sub>3</sub> antagonist:  
Dolasetron 100 mg PO Day 1  
OR  
Granisetron 2 mg PO daily or 1 mg PO BID or 0.01 mg/kg (maximum 1 mg) IV daily Day 1 or transdermal patch as 3.1 mg/24 hours patch (containing 34.3 mg granisetron total dose) applied approximately 24 – 48 hours prior to first dose of chemotherapy; maximum duration of patch is 7 days  
OR  
Ondansetron 16 – 24 mg PO or 8 – 24 mg (maximum 32 mg/day) IV Day 1  
OR  
Palonosetron 0.25 mg IV Day 1  
**AND**
- Steroid:  
Dexamethasone 12 mg PO/IV Day 1, then 8 mg PO Days 2 – 4 (with aprepitant 125 mg PO or fosaprepitant 115 mg IV Day 1)  
OR  
Dexamethasone 12 mg PO/IV Day 1, 8 mg PO Day 2, then 8 mg PO BID Days 3 – 4 (with fosaprepitant 150 mg IV Day 1)  
**AND**
- NK1 antagonist:  
Aprepitant 125 mg PO or fosaprepitant 115 mg IV Day 1, aprepitant 80 mg PO Days 2 – 3  
OR  
Fosaprepitant 150 mg IV Day 1
- ± Lorazepam 0.5 – 2 mg PO/IV or sublingual every 4 or every 6 hours as needed Days 1 – 4
- ± H<sub>2</sub> blocker or proton pump inhibitor

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**PRN for breakthrough:** All patients should be provided with at least one medication for breakthrough emesis. Choose a medication in a different category (or drug class) than scheduled antiemetics. Please consult the NCCN Clinical Practice Guidelines in Oncology™ Antiemesis for appropriate antiemetic therapy.

**Myeloid growth factor therapy (See [www.nccn.org/professionals/physician\\_gls/PDF/myeloid\\_growth.pdf](http://www.nccn.org/professionals/physician_gls/PDF/myeloid_growth.pdf))**

CSFs may be considered for primary prophylaxis based on FN risk of chemotherapy regimen. For more information on prophylaxis of FN, refer to NCCN Clinical Practice Guidelines in Oncology™ Myeloid Growth Factors and [Appendix C](#) to the NCCN Chemotherapy Order Templates.

**Other Supportive Therapy**

- For cyclophosphamide: *Example of recommended hydration:* Sodium chloride 0.9% infused IV at a rate of 1.5 – 3 mL/kg/hour for a total of 500 mL on day of chemotherapy.

**MONITORING AND HOLD PARAMETERS**

- CBC with differential should be assessed as clinically indicated for potential dose modification.
- For DOXOrubicin:
  - DOXOrubicin is an anthracycline. Cumulative anthracycline dosage should be monitored.
  - Ejection fraction should be assessed prior to initiation of treatment and as clinically indicated.
  - Liver function should be assessed to each cycle for potential dose modification.
- For cyclophosphamide: Renal function should be assessed as clinically indicated for potential dose modification.

**SAFETY PARAMETERS AND SPECIAL INSTRUCTIONS**

- For DOXOrubicin:
  - **DOXOrubicin is a vesicant.**
  - This agent is administered IV Push. The preferred IV Push method for a vesicant is administration through the side port of a freely flowing IV; alternatively, the drug can be administered via direct IV push.
- For aprepitant and fosaprepitant: Refer to [Appendix D](#) for specific information regarding associated drug interactions.

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