National Comprehensive Cancer Network®

NCCN Templates®

Breast Cancer

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

AC (DOXOrubicin/Cyclophosphamide) Every 21 Days Course

INDICATION:	REFERENCES:	NCCN SUPPORTIVE CARE:
Adjuvant	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.[b]	1. *Emetic Risk:* Day 1 High 2. *Fever Neutropenia Risk:* Intermediate

CHEMOTHERAPY REGIMEN

21-day cycle for 4 cycles

- **DOXOrubicin** 60 mg/m^2 IV Push on Day 1
- See *Safety Parameters and Special Instructions* for information on slow IV Push administration.
- **Cyclophosphamide** 600 mg/m^2 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)

Days 1 – 4

- 5-HT3 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_2 blocker or proton pump inhibitor

Template continued on page 2

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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)

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.