Chemotherapy Protocol

BREAST CANCER

DOXORUBICIN

(21 day)

Regimen

- Breast Cancer – Doxorubicin (21 day)

Indication

- Treatment of locally advanced or metastatic breast cancer
- WHO Performance status 0, 1, 2

Toxicity

Drug	Adverse Effect
Doxorubicin	Cardio toxicity, urinary discolouration (red)

The adverse effects listed are not exhaustive. Please refer to the relevant Summary of Product Characteristics for full details.

Monitoring

Regimen

- FBC, U&E's and LFT's prior to each cycle.
- Ensure adequate cardiac function before starting treatment. Baseline LVEF should be measured, particularly in patients with a history of cardiac problems or in the elderly.

Dose Modifications

The dose modifications listed are for haematological, liver and renal function only. Dose adjustments may be necessary for other toxicities as well.

In principle all dose reductions due to adverse drug reactions should not be re-escalated in subsequent cycles without consultant approval. It is also a general rule for chemotherapy that if a third dose reduction is necessary treatment should be stopped.

Please discuss all dose reductions / delays with the relevant consultant before prescribing, if appropriate. The approach may be different depending on the clinical circumstances. The following is a general guide only.

Haematological

Prior to prescribing the following treatment criteria must be met on day 1 of treatment.

Criteria	Eligible Level
Neutrophil	equal to or more than $1.5x10^9$/L
Platelets	equal to or more than $100x10^9$/L

Consider blood transfusion if patient symptomatic of anaemia or has a haemoglobin of less than 8g/dL

If counts on day one are below these criteria for neutrophil and/or platelets then delay treatment for seven days. Treatment should only be re-started when these levels are reached. Treatment may be resumed at the original dose or reduce the original dose of doxorubicin to 80% of the original dose depending on clinical circumstances. If a second episode of neutropenia and / or thrombocytopenia occurs or the time to reach the eligible level is longer than seven days consider stopping or changing treatment.

Kidney Impairment

Drug	Dose (% of original dose)
Doxorubicin	No dose adjustment necessary

Liver Impairment

Drug	Bilirubin (µmol/L)	Dose
Doxorubicin	20-51	50%
	51-85	25%
	Greater than 85	omit
	If the AST is 2-3xULN give 75% of the dose If the AST is greater than 3xULN give 50% of the dose	

Other

Dose reductions or interruptions in therapy are not necessary for those toxicities that are considered unlikely to be serious or life threatening. For example, alopecia, altered taste or nail changes.

Doxorubicin

Discontinue doxorubicin if cardiac failure develops.

Regimen

21 day cycle for 4 cycles

Drug	Dose	Days	Administration
Doxorubicin	75mg/m²	1	Intravenous bolus

Dose Information

- Doxorubicin will be dose banded as per the CSCCN agreed bands.
- The maximum lifetime cumulative dose of doxorubicin is 450mg/m^2. However prior radiotherapy to mediastinal/pericardial area should not receive a lifetime cumulative doxorubicin dose of more than 400mg/m².

Extravasation

- Doxorubicin - vesicant

Additional Therapy

- Antiemetics

  15-30 minutes prior to chemotherapy;

  - dexamethasone 8mg oral or equivalent intravenous dose
  - ondansetron 8mg oral or intravenous

  As take home medication:

  - dexamethasone 4mg twice a day for 3 days oral
  - metoclopramide 10mg three times a day when required oral
  - ondansetron 8mg twice a day for three days oral

- Mouthwashes according to local or national policy on the treatment of mucositis
- Gastric protection with a proton pump inhibitor or a H_2 antagonist may be considered in patients considered at high risk of GI ulceration or bleed.

Coding

- Procurement - X70.2
- Delivery - X72.3

References
1.Chan S, Friedrichs K, Noel D et al. Prospective randomised trial of docetaxel versus doxorubicin in patients with metastatic breast cancer. The 303 study group. J Clin Oncol 1999; 17 (8): 2341-2354.

REGIMEN SUMMARY

Doxorubicin (21 day)

Day One

1. Dexamethasone 8mg oral or equivalent intravenous dose

2. Ondansetron 8mg oral or intravenous

3. Doxorubicin 75mg/m² intravenous bolus over 10 minutes

Take Home Medicines

4. Dexamethasone 4mg twice a day for 3 days oral starting on day two of treatment

5. Metoclopramide 10mg three times a day when required oral

6. Ondansetron 8mg twice a day for 3 days oral starting on the evening of day one of treatment

DOCUMENT CONTROL

Version	Date	Amendment	Written By	Approved By
1.1	November 2014	Header changed Toxicities removed Adverse effects tabulated ≥ removed and written in full Dose modification tabulated Regimen tabulated Metoclopramide dose changed to 10mg Bolus removed from intravenous bolus throughout text Mucositis recommendation changed Dexamethasone TTO clarified Ondansetron TTO clarified Disclaimer added	Donna Kimber Pharmacy Technician	Dr Debbie Wright Pharmacist
1	August 2011	None	Anna Bunch Pharmacist Dr Debbie Wright Pharmacist	Dr Ellen Copson Consultant Medical Oncologist Dr Caroline Archer Consultant Medical Oncologist

This chemotherapy protocol has been developed as part of the chemotherapy electronic prescribing project. This was and remains a collaborative project that originated from the former CSCCN. These documents have been approved on behalf of the following Trusts;

Hampshire Hospitals NHS Foundation Trust
NHS Isle of Wight
Portsmouth Hospitals NHS Trust
Salisbury Hospital NHS Foundation Trust
University Hospital Southampton NHS Foundation Trust
Western Sussex Hospitals NHS Foundation Trust

All actions have been taken to ensure these protocols are correct. However, no responsibility can be taken for errors which occur as a result of following these guidelines.