

Chemotherapy Protocol

BREAST CANCER

EPIRUBICIN

(21 day)

Regimen

- Breast Cancer – Epirubicin (21 day)

Indication

- Treatment of locally advanced or metastatic breast cancer as a single agent
- Adjuvant / neoadjuvant treatment of early breast cancer in combination with other chemotherapy
- WHO Performance status 0, 1, 2

Toxicity

Drug	Adverse Effect
Epirubicin	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 cycle one the following treatment criteria must be met:

Criteria	Eligible Level
Neutrophils	equal to or more than $1.5 \times 10^9/L$
Platelets	equal to or more than $100 \times 10^9/L$

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

If counts on day one of subsequent cycles are below these criteria for neutrophils 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 epirubicin to 80% of the original dose depending on clinical circumstances. If a second episode of neutropenia / 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)
Epirubicin	Dose reduce in severe impairment only.

Liver Impairment

Drug	Bilirubin ($\mu\text{mol/L}$)	Dose
Epirubicin	24-51	50
	51-85	25
	More than 85	Contra-indicated
	If AST 2-4xULN give 50% dose, if the AST greater than 4xULN then give 25% 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.

Discontinue epirubicin if cardiac failure develops.

Regimen

21 day cycle for 4 cycles

Please check the number of cycles required prior to prescribing. The number may vary depending on whether the epirubicin is being used as a single agent or as sequential or combination therapy.

Drug	Dose	Days	Administration
Epirubicin	100mg/m ²	1	Intravenous bolus

Dose Information

- Epirubicin will be dose banded as per the CSCCN agreed bands.
- The maximum lifetime cumulative dose of epirubicin is 900mg/m².

Extravasation

- Epirubicin - 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 H₂ antagonist may be considered in patients considered at high risk of GI ulceration or bleed.

Coding

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

References

1. Bissett D, Paul J, Wishart G et al. Epirubicin chemotherapy and advanced breast cancer after adjuvant CMF chemotherapy. Clin Oncol (R Coll Radiol) 1995; 7 (1): 12-15.
2. Earl H, Poole C, Dunn J et al. NEAT: National Epirubicin Adjuvant Trial, a multicentre phase III randomised trial of Epirubicin x 4 and classical CMF (ECMF) x 4 vs. CMF x 6 (CMF). Proc Am Soc Clin Oncol 2002; Abstract number 2050.

REGIMEN SUMMARY

Epirubicin (21 day)

Day One

1. Dexamethasone 8mg oral or equivalent intravenous dose
2. Ondansetron 8mg oral or intravenous
3. Epirubicin 100mg/m² intravenous bolus over 10 minutes

Take Home Medicines

4. Dexamethasone 4mg twice a day for 3 days oral starting on day two of the cycle
5. Metoclopramide 10mg three times a day when required oral
6. Ondansetron 8mg twice a day for three days oral starting on the evening of day 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 Hepatic impairment updated Regimen tabulated Metoclopramide dose changed to 10mg Bolus removed from intravenous bolus throughout text Mucositis recommendation changed OPCS code updated Dexamethasone TTO clarified Ondansetron TTO clarified Disclaimer added	Donna Kimber Pharmacy Technician	Dr Debbie Wright Pharmacist
1	Nov 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.