Epirubicin (weekly) in Advanced / Metastatic Breast Cancer

Indication: First line palliative therapy in Advanced Breast Cancer frail patients who have not been previously treated with anthracycline and are not fit for combination chemotherapy with AC, EC, FEC or 3-weekly Epirubicin

Regimen details: Epirubicin 20 – 30 mg/m² IV D1

May consider Epirubicin 20mg/m² if patient > 60

Administration: Epirubicin IV Bolus injection via a fast-running Sodium Chloride 0.9% infusion

Frequency: 7 days, for up to 18 cycles

Extravasation: Epirubicin: Vesicant

Anti- emetics: Epirubicin: Moderate emetogenic

Follow Local Anti-emetic Policy

Regular investigation:
- FBC Weekly*
- LFTs Weekly*
- U&Es Weekly*
- CT scan Every 9 weeks
- MUGA scan See Comments (if necessary)

*Blood cell counts should be obtained at least 24 hours prior to chemotherapy administration date

Comments: Maximum cumulative dose Epirubicin= 950mg/m²

A baseline MUGA scan should be performed where the patient is considered at risk of having impaired cardiac function e.g. significant cardiac history, hypertension, obese, smoker, elderly, previous exposure to anthracyclines, previous thoracic radiotherapy. MUGA scan should be repeated if there is suspicion of cardiac toxicity at any point during treatment, or if cumulative anthracycline dose approaches maximum.

DOSE MODIFICATIONS

Haematological Toxicity

Day1

WBC < 3.0 x 10⁹/L or Neutrophils < 1.5 x 10⁹/L or Platelets < 100 x 10⁹/L

Delay for 1 week.

Repeat FBC - If within normal parameters, resume treatment with 100% doses

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Reason for Update: Network Protocol Development

Version: 3 Approved by Breast Consultant: Anne Rigg

Supersedes: All other versions Date: 14.12.09

Prepared by: M.T.Pacheca-Palomar Dec’09 Checked by (Network Pharmacist): Jacky Turner

Approved by SELCN DTAC Chair: Nic Ketley Date:
**Subsequent cycles**

If Neutrophils < 0.5 x 10⁹/L for 1 week, OR
Febrile neutropenia is diagnosed, OR
Platelets < 50 x 10⁹/L,
Epirubicin dose should be reduced to 80% from previous dose (do not escalate for subsequent cycles). If the patient continues to experience these haematological side effects at the lower dose, treatment should be discontinued

**Renal Impairment**
Consider Epirubicin dose reduction in severe renal impairment only:
If patients have Creatinine > 3.0 – 6.0 x ULN or higher creatinine levels OR,
GFR < 10ml/min
Contact the relevant Consultant and consider dose reduction

**Hepatic Impairment:**
Epirubicin: The dose should be adjusted as follows

<table>
<thead>
<tr>
<th>Bilirubin (µmol/L)</th>
<th>Epirubicin Dose</th>
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<tbody>
<tr>
<td>20 – 50</td>
<td>Give 50%</td>
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<tr>
<td>51 – 85</td>
<td>Give 25%</td>
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<tr>
<td>&gt; 85</td>
<td>Omit</td>
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**DOSE MODIFICATIONS FOR OTHER TOXICITIES AS APPROPRIATE**

Mucositis may appear 5-10 days after the start of treatment, and usually involves stomatitis with areas of painful erosions, mainly along the side of the tongue and the sublingual mucosa. For grade III Painful erythema or ulcers requiring IV rehydration resolving to Grade I or less painless ulcers or mild soreness: give Epirubicin 80% dose and recommend regular mouth care

**Toxicities:**
Myelosuppression; cardiotoxicity; mucositis; stomatitis; nausea; vomiting; diarrhoea; alopecia; urine discoloration, potential risk of infertility / early menopause,fatigue, skin sensitivity to sun exposure

**Drug interactions:**
- Cimetidine and Ciclosporin: can increase epirubicin serum levels
- Clozapine : increased risk of agranulocytosis, avoid concomitant use
- Digoxin tablets: reduced absorption (resolved by giving the digoxin in liquid)
- Phenytoin: reduced absorption of the antiepileptic
- Verapamil: possibly increases epirubicin bone marrow depressant effects

**References:**
www.medicines.org.uk
ASWCS Chemotherapy Handbook January 2005
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