Chemotherapy Protocol

BREAST CANCER

VINORELBINE

(INTRAVENOUS)

Regimen

- Breast Cancer – Vinorelbine

Indication

- Treatment of locally advanced or metastatic breast cancer that has failed to adequately respond to an anthracycline or taxane containing regimen or when further anthracycline or taxane treatment is contra-indicated

- WHO Performance status 0, 1, 2

Toxicity

Drug	Adverse Effect
Vinorelbine	Neurological toxicity, constipation, jaw pain

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

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;

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 Only re-start treatment when these levels are reached. Consider a dose reduction for further cycles. This applies to day 1 and 8.

Prior to prescribing the following treatment criteria must be met on day eight;

Criteria	Eligible Level
Neutrophil	equal to or more than $1x10^9$/L
Platelets	equal to or more than $75x10^9$/L

Kidney Impairment

Drug	Recommendation
Vinorelbine	No dose adjustment necessary

Liver Impairment

Drug	Recommendation
Vinorelbine	For the intravenous preparation consider a dose reduction to 20mg/m^2 in severe liver impairment In breast cancer patients, clearance is not altered in presence of moderate liver metastases (defined as less than 75% of liver volume replaced by the tumour). In these patients there is no pharmacokinetic rationale for reducing doses. In patients with massive liver metastases (defined as 75% or more of liver volume replaced by the tumour), it is suggested that the dose is reduced to 20mg/m² and the haematological toxicity closely followed.

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.

When a NCI-CTC grade 2 peripheral neuropathy develops withhold the vinorelbine only until it has recovered to grade 1 then reduce the dose to 20mg/m^2

If the peripheral is classified at NCI-CTC grade 3 again withhold the vinorelbine until recovered to grade 1 then reduce the dose to 15mg/m^2 of the original dose reduce. Discontinue the vinorelbine if there is no recovery following this decrease in dose. Constipation should at a NCI-CTC grade 1-2 may be managed with dietary interventions or laxatives. For constipation occurring at NCI-CTC grade 3 and above

in the first instance reduce the dose of vinorelbine to 20mg/m^2. For persistent symptoms the dose may be further reduced to 15mg/m^2 or treatment stopped.

For other toxicities occurring at NCI-CTC grade 3 withhold the vinorelbine until recovered to NCI-CTC grade 1 then dose reduce to 20mg/m^2. If these toxicities occur at NCI-CTC grade 4 and above withhold the vinorelbine until the symptoms have resolved to NCI-CTC grade 1. Consultant advice should then be sought on whether to re-start therapy.

Regimen

Vinorelbine is myelosuppressive and in those with poor bone marrow reserves (for example due to extensive prior treatment, bone metastasis or extensive skeletal radiation) consider a starting dose of 25mg/m² with a view to increase to 30mg/m² if well tolerated.

21 day cycle for 6 cycles

Drug	Dose	Days	Administration
Vinorelbine	30mg/m^2 (max dose 60mg)	1, 8	Intravenous bolus in 50ml sodium chloride 0.9% over 10 minutes

Dose Information

- Vinorelbine will be dose banded as per the CSCCN agreed bands
- The maximum dose of intravenous vinorelbine is 60mg

Administration Information

Extravasation

- Vinorelbine – vesicant

Additional Therapy

- Antiemetics

  15-30 minutes before chemotherapy

  - metoclopramide 10mg oral or intravenous

  As take home medication

  - metoclopramide 10mg three times a day when required oral

- 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.

Additional Information

- The National Patient Safety Agency report NPSA/2008/RRR04 must be followed in relation to intravenous administration of vinca alkaloids.

Coding

- Procurement – X70.4
- Delivery – X72.3, X72.4

References
1.National Institute of Health and Clinical Excellence Guideline (2009). CG81. Advanced Breast Cancer: Diagnosis and Treatment. NICE:London
2.Martin MJ, Ruiz A, Munoz M et al Gemcitabine plus vinorelbine versus vinorelbine monotherapy in patients with metastatic breast cancer previously treated with anthracyclines and taxanes: final results of the phase III Spanish Breast Cancer Research Group (GEICAM) trial. Lancet Oncol 2007; 8 (3): 219-225.
3.Zelek L, Barthier S, Riofrio M et al. Weekly vinorelbine is an effective palliative regimen after failure with anthracyclines and taxanes in metastatic breast carcinoma. Cancer (2001); 92: 2267

REGIMEN SUMMARY

Vinorelbine

Day One and Eight

1. Metoclopramide 10mg oral or intravenous

2. Vinorelbine 30mg/m² intravenous bolus in 50ml sodium chloride 0.9% over 10 minutes

Take Home Medicines

3. Metoclopramide 10mg three times a day when required oral*

*This will only appear for dispensing as an original pack on day one. Patients should be counselled that it is the supply for days 1 and 8.

DOCUMENT CONTROL

Version	Date	Amendment	Written By	Approved By
1.1	August 2014	Header changed Toxicities removed Adverse effects tabulated ≥ removed and written in full Hepatic impairment updated Dose modification tabulated Regimen tabulated Metoclopramide dose changed to 10mg Bolus removed from intravenous bolus throughout text OPCS code updated 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