

Chemotherapy Protocol

LUNG CANCER – NON-SMALL CELL (NSCLC)

VINORELBINE (Oral)

(Day 1 and 8)

This protocol may require funding

Regimen

- NSCLC – Vinorelbine PO (1, 8)

Indication

- NSCLC stage III or IV
- Palliative intent

Toxicity

Drug	Adverse Effect
Vinorelbine	Peripheral neuropathy, gastro-intestinal disturbances

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

Monitoring

Disease

- A baseline chest x-ray should be performed before starting treatment and up to date (ideally within 1 month) cross section imaging should also be performed

Drugs

- FBC prior to treatment on day 1 and 8 for cycles 1 and 2. This may be reduced to 3 weekly monitoring (prior to day 1 only) at the clinician's discretion once the patient's haematological response to treatment has been established and is considered stable.
- LFTs and U&Es every 3 weeks

Dose Modifications

The dose modifications listed are for haematological, liver and renal function and drug specific toxicities 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.

Haematological

Dose modifications for haematological toxicity in the table below are for general guidance only. Always refer to the responsible consultant as any dose reductions or delays will be dependent on clinical circumstances and treatment intent.

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

If, on the day of treatment, the neutrophil count is below $1.5 \times 10^9/L$ and/or the platelet count is below $100 \times 10^9/L$ treatment should be delayed until recovery.

Beyond the third administration it is recommended to increase the dose of oral vinorelbine to 80mg/m^2 except where the neutrophil count has dropped once below $0.5 \times 10^9/L$ or more than once between $0.5-1 \times 10^9/L$ during the first three administrations at 60mg/m^2 .

Neutrophil count during the first 3 administrations of 60mg/m^2	More than $1 \times 10^9/L$	$0.5-1 \times 10^9/L$ (1 episode)	$0.5-1 \times 10^9/L$ (2 episodes)	Less than $0.5 \times 10^9/L$
Recommended dose starting with the 4 th administration	80mg/m^2		60mg/m^2	

For any administration planned to be given at 80mg/m^2 , if the neutrophil count is below $0.5 \times 10^9/L$ or more than once between $0.5-1 \times 10^9/L$ the administration should be delayed until recovery and the dose reduced from 80 to 60mg/m^2 during the following three administrations.

Neutrophil count beyond the 4 th dose of 80mg/m^2	more than $1 \times 10^9/L$	$0.5-1 \times 10^9/L$ (1 episode)	$0.5-1 \times 10^9/L$ (2 episodes)	less than 500
Recommended dose starting with the next administration	80mg/m^2		60mg/m^2	

It is possible to re-escalate the dose from 60 to 80mg/m^2 if the neutrophil count did not drop below $0.5 \times 10^9/L$ or more than once between $0.5-1 \times 10^9/L$ during three administrations given at 60mg/m^2 according to the rules previously defined for the first three administrations.

Liver / Renal Impairment

Drug	Kidney	Liver
Vinorelbine (oral)	No dose adjustment necessary	Oral vinorelbine can be administered at the standard dose of 60 mg/m ² /week in patients with mild liver impairment (bilirubin less than 1.5xULN, and ALT and/or AST from 1.5-2.5xULN). In patients with moderate liver impairment (bilirubin from 1.5 to 3xULN whatever the levels of ALT and AST), oral vinorelbine should be administered at a dose of 50 mg/m ² /week. The administration of oral vinorelbine in patients with severe hepatic impairment is contra-indicated

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.

Peripheral neuropathy occurring at NCI-CTC grade two then delay treatment for seven days. If the neuropathy resolves to NCI-CTC grade one or below then resume treatment at a dose of 60mg/m² or 50mg/m² if 60mg/m² was the treatment dose. If the symptoms do not resolve within seven days consider stopping treatment. For peripheral neuropathy at NCI-CTC grade 3 and above consider stopping treatment.

For all other NCI-CTC grade 3 and above toxicities defer treatment for seven days and until resolved to NCI-CTC grade 1 or below. Treatment may be re-started using a dose of 60mg/m² or 50mg/m² if 60mg/m² was the treatment dose. If more than seven days is required for symptoms to resolve to this level consider stopping treatment.

Regimen

21 day cycle for 4 cycles

Cycle 1

Drug	Dose	Days	Administration
Vinorelbine (oral)	60mg/m ² (max 120mg)	1, 8	Oral

Cycle 2

Drug	Dose	Days	Administration
Vinorelbine (oral)	60mg/m ² (max 120mg)	1	Oral
Vinorelbine (oral)	80mg/m ² (max 160mg)	8	Oral

Cycle 3, 4

Drug	Dose	Days	Administration
Vinorelbine (oral)	80mg/m ² (max 160mg)	1, 8	Oral

Dose Information

- Oral vinorelbine will be dose rounded to the nearest 10mg (up if halfway)
- The maximum dose of oral vinorelbine is 120mg for the 60mg/m² dose and 160mg for the 80mg/m² dose.

Administration Information

- Vinorelbine is available as 20mg, 30mg and 80mg capsules
- Vinorelbine capsules should be swallowed with cold water without chewing or sucking the capsule
- It is recommended to take vinorelbine capsules with food
- Vinorelbine capsules should be safely stored in the refrigerator away from foodstuffs

Additional Therapy

- Antiemetics

As take home medication

- ondansetron 8mg to be taken 15-30 minutes prior to the vinorelbine. An additional 8mg may be taken 12 hours later if required.

On cycle one consider supplying metoclopramide 10mg three time a day when required for the relief of nausea.

- 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 – X73.1

Additional Information

- The National Patient Safety Alert on oral chemotherapy (NPSA/2008/RRR001) must be followed in relation to oral vinorelbine.
- This is an unlicensed dosage schedule.

References

1. National Institute of Clinical Excellence (2005). CG24. The Diagnosis and Treatment of Lung Cancer. Methods, Evidence and Guidance. DOH: London.
2. Gridelli C, Manegold C, Mali P et al. Oral vinorelbine given as monotherapy to advanced elderly NSCLC patients: a multicentre phase II trial. *Eur J Cancer* 2004; 40 (16): 2424-2431.

REGIMEN SUMMARY

Vinorelbine PO (1, 8)

Cycle 1, day 1, 8

1. Ondansetron 8mg to be taken as directed.
Administration instructions
Take 8mg as a single dose 15-30 minutes prior to the vinorelbine. An additional 8mg may be taken 12 hours later for the relief of nausea and vomiting. Please supply one day. If days one and eight are approved together this may be dispensed as one supply with instructions to take on day one and eight.
2. Vinorelbine 60mg/m² once a day oral
Administration instructions
Vinorelbine capsules should be taken with or after food, swallowed whole, not chewed.
If days one and eight are approved together this may be dispensed as one supply with instructions to take a dose on day one and eight.

Cycle 2, day 1

3. Ondansetron 8mg to be taken as directed.
Administration instructions
Take 8mg as a single dose 15-30 minutes prior to the vinorelbine. An additional 8mg may be taken 12 hours later for the relief of nausea and vomiting. Please supply one day. If days one and eight are approved together this may be dispensed as one supply with instructions to take on day one and eight.
4. Vinorelbine 60mg/m² once a day oral
Administration instructions
Vinorelbine capsules should be taken with or after food, swallowed whole, not chewed.
If days one and eight are approved together this may be dispensed as one supply with instructions to take a dose on day one and eight.

Cycle 2, day 8

5. Ondansetron 8mg to be taken as directed.
Administration instructions
Take 8mg as a single dose 15-30 minutes prior to the vinorelbine. An additional 8mg may be taken 12 hours later for the relief of nausea and vomiting. Please supply one day. If days one and eight are approved together this may be dispensed as one supply with instructions to take on day one and eight.
6. Vinorelbine 80mg/m² once a day oral
Administration instructions
Vinorelbine capsules should be taken with or after food, swallowed whole, not chewed.
If day one and eight of the cycle are approved together this may be dispensed as one supply with instructions to take a dose on day one and eight.

Cycle 3, 4 day 1, 8

7. Ondansetron 8mg to be taken as directed.
Administration instructions
Take 8mg as a single dose 15-30 minutes prior to the vinorelbine. An additional 8mg may be taken 12 hours later for the relief of nausea and vomiting. Please supply one day. If days one and eight are approved together this may be dispensed as one supply with instructions to take on day one and eight.
8. Vinorelbine 80mg/m² once a day oral
Administration instructions
Vinorelbine capsules should be taken with or after food, swallowed whole, not chewed.
If days one and eight are approved together this may be dispensed as one supply with instructions to take a dose on day one and eight.

DOCUMENT CONTROL

Version	Date	Amendment	Written By	Approved By
1.1	Jan 2014	Header changed Metoclopramide dose changed Hospitals and disclaimer added	Dr Deborah Wright Pharmacist	Donna Kimber Pharmacy Technician
1	Jan 2013	None	Rebecca Wills Pharmacist Dr Deborah Wright Pharmacist	Dr Tim Gulliford 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 Hospitals NHS Foundation Trust
 University Hospital Southampton NHS Foundation Trust
 Western Sussex Hospitals NHS 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.