

BC Cancer Protocol Summary for Treatment for Advanced Non-Small Cell Lung Cancer (NSCLC) with CISplatin and Vinorelbine

Protocol Code: LUAVNP

Tumour Group: Lung

Contact Physician: Dr. Christopher Lee

ELIGIBILITY:

- Previously untreated stage IIIB or IV disease
 - May be used as second- or third-line therapy if prior treatment with immunotherapy or targeted agents
- Also:
 - Previously untreated stage IIIA disease not amenable to combined modality therapy
 - Inoperable early stage disease
 - Recurrent disease, including individuals treated with adjuvant chemotherapy following resection of early stage disease or individuals treated with combined modality therapy for locally advanced disease
- ECOG performance status of 0, 1 or 2
- Adequate hematologic, hepatic and renal function

EXCLUSIONS:

- More than one previous chemotherapy regimen

TESTS:

- Baseline: CBC & differential, platelets, creatinine, alkaline phosphatase, ALT, total bilirubin, LDH
 - C-reactive protein and albumin (optional, and results do not have to be available to proceed with first treatment)
- Before each treatment: CBC & differential, platelets, creatinine
- If clinically indicated: bilirubin prior to each cycle

PREMEDICATIONS:

- Antiemetic protocol for **moderately** emetogenic chemotherapy as long as CISplatin dose is not greater than or equal to 50 mg. If CISplatin is greater than or equal to 50 mg, **or if giving CARBOplatin**, use antiemetic protocol for highly emetogenic chemotherapy (see protocol [SCNAUSEA](#)).

TREATMENT:

Drug	Dose	BC Cancer Administration Guideline
(Drugs can be given in any sequence)		
CISplatin	30 mg/m ² /day on days 1 and 8	IV in NS 100 to 250 mL over 30 minutes
vinorelbine	30 mg/m ² /day on days 1 and 8	IV in NS 50 mL over 6 minutes, then flush line with NS 75 to 125 mL prior to removing/capping IV access

- **Repeat every 21 days x 6 cycles**

Alternatively, CARBOplatin may be substituted for CISplatin (please note modified Vinorelbine dosing):

Drug	Dose	BC Cancer Administration Guideline
(Drugs can be given in any sequence)		
CARBOplatin	AUC 5 on day 1 only Dose = AUC x (GFR* + 25)	IV in NS 100 to 250 mL over 30 minutes
vinorelbine	25 mg/m ² /day on days 1 and 8	IV in NS 50 mL over 6 minutes, then flush line with NS 75 to 125 mL prior to removing/capping IV access

- **Repeat every 21 days x 6 cycles**

* GFR preferably from nuclear renogram, if not possible use:

$$\text{GFR} = \frac{N \times (140 - \text{age in years}) \times \text{wt (kg)}}{\text{serum creatinine (micromol/L)}} \quad N = 1.04 \text{ (women) or } 1.23 \text{ (men)}$$

The estimated GFR should be capped at 125 mL/min when it is used to calculate the initial CARBOplatin dose. When a nuclear renogram is available, this clearance would take precedence.

DOSE MODIFICATIONS:

1. HEMATOLOGY

For vinorelbine

ANC (x 10 ⁹ /L)		Platelets (x 10 ⁹ /L)	Dose **
greater than or equal to 1.0	and	greater than or equal to 100	100%
0.5 to less than 1.0	or	75 to less than 100	75%
less than 0.5	or	less than 75	Delay
**Consider decreasing vinorelbine to 75% or 22.5mg/m² if an episode of febrile neutropenia occurs with the prior cycle of treatment			

2. HEPATIC DYSFUNCTION

For vinorelbine

Bilirubin (micromol/L)	Dose
less than or equal to 35	100%
36 to 50	50%
greater than 50	25%

3. RENAL DYSFUNCTION

For CISplatin:

Calculated Cr Clearance (mL/min)	Dose
greater than or equal to 60	100%
45 to less than 60	66% CISplatin or go to CARBOplatin option
less than 45	Hold CISplatin or delay with additional IV fluids or go to CARBOplatin option

PRECAUTIONS:

- Extravasation:** vinorelbine causes pain and tissue necrosis if extravasated. It is recommended to flush thoroughly with 75 to 125 mL NS after infusing vinorelbine. Hydrocortisone 100 mg IV prior to vinorelbine may be of benefit. Refer to BC Cancer Extravasation Guidelines.
- Neutropenia:** Fever or other evidence of infection must be assessed promptly and treated aggressively.

3. **Renal Toxicity:** Nephrotoxicity is common with CISplatin. Encourage oral hydration. Avoid nephrotoxic drugs such as aminoglycoside antibiotics.

Contact Dr. Christopher Lee or tumour group delegate at (604) 930-4064 or 1-800-663-3333 with any problems or questions regarding this treatment program.

REFERENCES:

1. Lee CW, Murray N, Murphy K, K, et al. Split-dose cisplatin and vinorelbine in advanced non-small cell lung cancer: treatment outcomes including health-related quality of life. *Lung Cancer* 2003; 41 suppl 2: S145.
2. Couture F, Vincent MD, Couture F, et al. Carboplatin and vinorelbine ('CarNavel'): A prospective phase II evaluation of 2 doses of carboplatin in advanced non-small cell lung cancer (A-NSCLC). *Proc Am Soc Clin Oncol* 2003; abstr 2715.