BC Cancer Protocol Summary For First-Line Treatment of Advanced Non-Small Cell Lung Cancer (NSCLC) with CISplatin and DOCEtaxel

***Protocol Code**:* *LUAVDC*

***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
- Adequate hematologic, hepatic and renal function.
- Age greater than or equal to 18 years
- ECOG performance status 0, 1
- Protocol **NOT** to be delivered with concurrent radiotherapy
- For other indications, BC Cancer Agency Compassionate Access Program (CAP) approval must be obtained

EXCLUSION:
- ECOG performance status greater than or equal to 2

TESTS:
- Baseline: CBC & differential, platelets, serum 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, serum creatinine
- Before cycle 4 and anytime if clinically indicated*: alkaline phosphatase, ALT, total bilirubin, LDH

*See precaution #5 for guidelines regarding hepatic function.

PREMEDICATIONS:
- dexamethasone 8 mg PO bid for 3 days starting one day prior to each administration of DOCEtaxel
- A minimum of 3 doses of dexamethasone pre-treatment are required
- Antiemetic protocol for highly emetogenic chemotherapy (see protocol SCNAUSEA).
- DOCEtaxel-induced onycholysis and cutaneous toxicity of the hands may be prevented by wearing frozen gloves starting 15 minutes before DOCEtaxel infusion until 15 minutes after end of DOCEtaxel infusion; gloves should be changed after 45 minutes of wearing to ensure they remain cold during the entire DOCEtaxel infusion.

TREATMENT:

Drug	Dose	BC Cancer Administration Guideline
DOCEtaxel	75 mg/m^2	IV in 250 to 500 mL NS or D5W over 1 hour (use non-DEHP equipment)
CISplatin	75 mg/m^2	Prehydrate with 1000 mL NS over 1 hour, then CISplatin IV in 500 mL NS with 20 mEq potassium chloride, 1 g magnesium sulfate, 30 g mannitol over 1 hour

- Repeat every 21 days x 4 to 6 cycles

DOSE MODIFICATIONS:

1. **Hematology** (for DOCEtaxel)

ANC (x 10^9/L)		Platelets (x 10^9/L)	Dose*
greater than or equal to 1.5	and	greater than or equal to 100	100%
1.0 to less than 1.5	Or	75 to less than 100	75%
less than 1.0	Or	less than 75	**Delay**
*Consider decreasing DOCEtaxel to 75% if an episode of febrile neutropenia occurs with the prior cycle of treatment			

2. **Hepatic dysfunction**: for DOCEtaxel

Alkaline phosphatase		AST and/or ALT	Dose
less than 2.5 x ULN	**and**	less than 1.5 x ULN	100%
2.5 to 5 x ULN	**and**	1.5 to 5 x ULN	75%
greater than 5 x ULN	**or**	greater than 5 x ULN	**Delay***
***Discuss with contact physician**			

ULN = upper limit of normal

3. **RENAL DYSFUNCTION**: for CISplatin

Calculated Cr Clearance (mL/min)	CISplatin dose
greater than or equal to 60	100%
45 to less than 60	80% CISplatin
less than 45	Hold CISplatin or delay with additional IV fluids

PRECAUTIONS:

1. **Fluid retention**: Dexamethasone premedication must be given to reduce incidence and severity of fluid retention.
2. **Hypersensitivity** reactions to DOCEtaxel are common but it is not necessary to routinely initiate the infusion slowly. If slow initiation of infusion is needed, start infusion at 30 mL/h x 5 minutes, then 60 mL/h x 5 minutes, then 120 mL/h x 5 minutes, then complete infusion at 250 mL/h (for 500 mL bag, continue 250 mL/h for 5 minutes and then complete infusion at 500 mL/h). Refer to BC Cancer Hypersensitivity Guidelines.
3. **Extravasation**: DOCEtaxel causes pain and tissue necrosis if extravasated. Refer to BC Cancer Extravasation Guidelines.
4. **Neutropenia**: Fever or other evidence of infection must be assessed promptly and treated aggressively.
5. **Hepatic Dysfunction**: DOCEtaxel undergoes hepatic metabolism. Hepatic dysfunction (particularly elevated AST) may lead to increased toxicity and usually requires a dose reduction. Baseline liver enzymes are recommended before cycle 1 and then if clinically indicated (eg, repeat liver enzymes prior to each treatment if liver enzymes are elevated, liver metastases are present or there is severe toxicity such as neutropenia). If liver enzymes are normal and there is no evidence of liver metastases or severe toxicity, check liver enzymes after 3 cycles (i.e., at cycle 4). Note: this information is intended to provide guidance but physicians must use their clinical judgment when making decisions regarding monitoring and dose adjustments.

Call 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. Fossella F. Docetaxel + Cisplatin (DC) and Docetaxel + Carboplatin (DCCb) vs Vinorelbine + Cisplatin (VC) in chemotherapy –naïve patients with advanced and metastatic non-small cell lung cancer (NSCLC): Results of a multicenter, randomized phase III study. European Journal of Cancer Vol 37, Suppl.6, October 2001, page 154.
2. Fossella F, Pereira JR, von Pawel J, et al. Randomized, multinational, phase III study of docetaxel plus platinum combinations versus vinorelbine plus cisplatin for advanced non-small-cell lung cancer: The TAX 326 Study Group. J Clin Oncol 2003;21:3016-24.