### CARBOPLATIN & PACLITAXEL for Lung & Ovary

#### DRUG ADMINISTRATION SCHEDULE

<table>
<thead>
<tr>
<th>Day</th>
<th>Drug</th>
<th>Dose</th>
<th>Route</th>
<th>Diluent &amp; Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td>Sodium Chloride 0.9%</td>
<td>250/500ml</td>
<td>Infusion</td>
<td>Fast Running</td>
</tr>
<tr>
<td></td>
<td>Dexamethasone*</td>
<td>20mg</td>
<td>Intravenous or Oral</td>
<td>Bolus or</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6 and 12 hours prior to treatment</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chlorphenamine</td>
<td>10mg</td>
<td>Intravenous</td>
<td>Slow bolus</td>
</tr>
<tr>
<td></td>
<td>Ranitidine</td>
<td>50mg</td>
<td>Intravenous</td>
<td>Slow bolus</td>
</tr>
<tr>
<td></td>
<td>Ondansetron</td>
<td>8mg</td>
<td>Oral</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Paclitaxel</td>
<td>175mg/m²</td>
<td>IV Infusion</td>
<td>500ml NaCl 0.9% over 3hrs (Use PVC-free bag &amp; line) (start infusion very slowly)</td>
</tr>
<tr>
<td></td>
<td>Carboplatin AUC 5 or 6</td>
<td>IV Infusion</td>
<td>500/250ml 5% Glucose over 30 to 60 Minutes</td>
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</table>

*See premedication section for details

### CARBOPLATIN DOSAGE:  
Dose (mg) = AUC x (GFR + 25)

Where the GFR is the non-corrected EDTA clearance. If estimated GFR is undertaken the Wright formula must be used with AUC 5. Cockcroft & Gault formula is less accurate.

### CYCLE LENGTH AND NUMBER OF DAYS

Administered on a 21-day cycle (usually 4 cycles lung, 6 cycles ovary)

### APPROVED INDICATIONS

First line treatment for NSCLC  
First line treatment for ovarian cancer and option for patients whose disease relapses after 6 months of first-line therapy.

### PREMEDICATION

*Premedication of dexamethasone, ranitidine and chlorpheniramine is given prior to paclitaxel infusion to reduce risk of hypersensitivity reaction. Dexamethasone can be given either as 20mg orally 12 and 6 hours prior to treatment or as a 20mg IV bolus prior to treatment.

**Antiemetic cover with neurokinin 1 (NK1) receptor antagonists**

ASCO 2017 antiemetic guidance recommends regimens containing carboplatin ≥ AUC4 should be classified as high risk of CINV and patients offered a three-drug combination of a neurokinin 1 (NK1) receptor antagonist, a serotonin (5-HT3) receptor antagonist and dexamethasone. Current practice in NCA is to start with a two drug regimen serotonin (5-HT3) receptor antagonist and dexamethasone and add in a neurokinin 1 (NK1) receptor antagonist if CINV not adequately controlled. However if pre-assessment of patient identifies risk factors for CINV, units may wish to start with 3 drug combination.
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RECOMMENDED TAKE HOME MEDICATION
Ondansetron 8mgs twice daily for 2 to 3 days
Dexamethasone 4mgs twice daily for 1 to 3 days
Metoclopramide 10 three times daily as required

*Suggested antiemetic regimen - may vary with local practice. See CINV policy for more details*

INVESTIGATIONS / MONITORING REQUIRED

Pre-treatment
Full blood count, urea and electrolytes, liver function tests, baseline radiology (CXR/ CT).
Repeat radiology after 2 cycles
Check renal function before commencing platinum. Use EDTA or Wright formulae to calculate GFR.

Prior to each cycle
FBC, U/E’s, LFT’s as required
GFR double checked using Wright formulae against baseline.

ASSESSMENT OF RESPONSE
Metastatic: Tumour size and patient symptomatic response

REVIEW BY CLINICIAN
To be reviewed by either a Nurse, Pharmacist or Clinician before every cycle.

NURSE / PHARMACIST LED REVIEW
On cycles where not seen by clinician.

ADMINISTRATION NOTES
- Paclitaxel must be administered via a non-PVC administration set
- There is a risk of infusion reactions with paclitaxel. This is commonly with the first two cycles and often within the first few minutes of starting chemotherapy.
- May not need to stop treatment for minor hypersensitivity e.g. reactions, flushing, localised rash. Must be stopped for major reactions, e.g. hypotension, dyspnoea, angioedema or generalised urticaria.
- If patient has hypersensitivity reaction follow manufacturers re-challenge guidelines before continuing with treatment.
- Units administering paclitaxel must have facilities available for the treatment of anaphylaxis and resuscitation.
- Blood pressure & pulse should be monitored regularly (e.g. every 30 minutes) during paclitaxel infusion

EXTRAVASATION See NCA/Local Policy

TOXICITIES
- Risk of hypersensitivity and anaphylaxis, particularly on first and second cycle, starting within a few minutes of administration
- Nausea and vomiting
- Hypotension and bradycardia
- Myelosuppression, particularly, thrombocytopenia, anaemia & neutropenia
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- Nephrotoxicity
- Alopecia
- Peripheral neuropathy
- Otological impairment, especially at 8000 Hz
- Myalgia, back pain on administration

DOSE MODIFICATION / TREATMENT DELAYS

**Haematological Toxicity:**
Proceed on day 1 if:

| PLT ≥ 75 | ANC ≥ 1.0 |

If Hb < 10 & patient symptomatic will need blood transfusion, but may proceed with chemotherapy as planned if performance status (PS) stable.

**Non-Haematological Toxicity:**
If pre-treatment U&E’s & LFT’s abnormal, delay treatment 1 week and discuss with Oncologist as may need dose reduction.

*Hepatic impairment*
Bilirubin: paclitaxel dose reduction of 25% may be required in patients with disturbed liver biochemistry (bilirubin >1 x ULN).
Paclitaxel contraindicated if bilirubin > 2.5 x ULN, transaminases > 2.5 x ULN, alk phos > 6 x ULN

*Renal toxicity*
If creatinine level increases by >20% from the result used to calculate GFR discuss with consultant and consider repeating EDTA.

*Other*
If PS deteriorates to 3 or 4 and on assessment patient is more symptomatic withhold treatment and discuss with Oncologist

**TREATMENT LOCATION**
Can be given at Cancer Centre or Cancer Unit

**REFERENCES:**

## Document Control

<table>
<thead>
<tr>
<th>Document Title:</th>
<th>CARBOPLATIN &amp; PACLITAXEL for Lung &amp; Ovary</th>
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<tr>
<td>Document No:</td>
<td>CRP09 L014</td>
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<tr>
<td>Current Version:</td>
<td>1.5</td>
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<tr>
<td>Reviewer:</td>
<td>Chris Beck Chemotherapy Pharmacist Northern Cancer Alliance</td>
</tr>
<tr>
<td>Date Approved:</td>
<td>02.03.18</td>
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<tr>
<td>Approved by:</td>
<td>Steve Williamson Consultant Pharmacist Northern Cancer Alliance</td>
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<td>Due for Review</td>
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### Summary of Changes

1.1 Reformatted from old NCN/CCA versions
1.2 Combined with Ovary protocol and updated GFR calculation advice.
1.3 Protocol reviewed and reissued.
1.4 Antiemetic advice updated
1.5 Reviewed parameters, updated formatting.