

## Chemotherapy Protocol

### GYNAECOLOGICAL CANCER

#### CARBOPLATIN (AUC6) 6 CYCLES

##### Regimen

- Ovary – Carboplatin (AUC6) 6 Cycles

##### Indication

- Adjuvant treatment in patients with moderate to high risk stage 1A/B ovarian cancer
- Adjuvant treatment in patients with stage 1C, II - VI ovarian cancer who are unsuitable for paclitaxel
- Second line or subsequent treatment of platinum sensitive ovarian cancer
- WHO performance status 0, 1

##### Toxicity

Drug	Adverse Effect
Carboplatin	Thrombocytopenia, peripheral neuropathy, nephrotoxicity at high doses, electrolyte disturbances

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

##### Monitoring

- FBC, LFTs and U&Es prior to each cycle
- CA125 prior to each cycle

##### 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*

Prior to each cycle the following criteria must be met;

Criteria	Eligible Level
Neutrophil	equal to or more than $1 \times 10^9/L$
Platelets	equal to or more than $100 \times 10^9/L$

Consider blood transfusion or the use of erythropoietin according to NICE TA323 if patient symptomatic of anaemia or has haemoglobin of less than 8g/dL (80g/L)

### Day 1

Neutrophils ( $\times 10^9/L$ )	Dose Modifications
1 or greater	100%
less than 1	Delay for 7 days. If the counts recover to $1 \times 10^9/L$ or greater within this time continue with full dose. If the counts do not recover within 7 days or repeated delays are required then delay until recovery then reduce dose by 20%
Platelets ( $\times 10^9/L$ )	Dose Modifications
100 or greater	100%
50-99	Delay for 7 days. If the counts recover to $100 \times 10^9/L$ or greater within this time continue with full dose. If counts do not recover within 7 days or repeated delays are required then delay until recovery then reduce dose by 20%
less than 50	Delay until recovery then reduce dose by 50%

### Hepatic Impairment

Drug	Bilirubin $\mu\text{mol/L}$	AST/ALT units	Dose (% of original dose)
Carboplatin	N/A	N/A	No dose adjustment needed

### Renal Impairment

Drug	Creatinine Clearance (ml/min)	Dose (% of original dose)
Carboplatin	less than 20	Omit

Significant changes in GFR of more than 10% may require dose adjustment.

### 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.

For all other non-haematological NCI-CTC grade 3 and above toxicities delay treatment until the adverse effect has resolved to NCI-CTC grade 1 or below. The dose should then be reduced to 80% of the original dose or discontinued as appropriate.

### [Regimen](#)

#### **21 day cycle for 6 cycles**

Drug	Dose	Days	Administration
Carboplatin	AUC6 (max dose 890mg)	1	Intravenous infusion in 500ml glucose 5% over 60 minutes

### [Dose Information](#)

- Carboplatin will be dose banded according to the national dose bands (10mg/ml)
- The recommended maximum dose when using a calculated creatinine clearance at AUC6 is 900mg (set as 890mg in ARIA to match the national dose bands)
- If you have an obese patient or an individual with a calculated creatinine clearance above 125ml/min please seek advice from the relevant consultant.
- It should be noted that the dose of carboplatin may need to be altered if there is a change (improvement or reduction) in renal function of more than 10% from the previous cycle.

### [Administration Information](#)

#### *Extravasation*

- Carboplatin – irritant

### [Additional Therapy](#)

- Antiemetics

15 – 30 minutes prior to chemotherapy

- dexamethasone 8mg oral or intravenous
- ondansetron 8mg oral or intravenous

As take home medication

- dexamethasone 4mg oral twice a day for 3 days
- metoclopramide 10mg oral three times a day as required
- Gastric protection with a proton pump inhibitor or a H<sub>2</sub> antagonist may be considered in patients considered at high risk of GI ulceration or bleed.

#### References

1. Paclitaxel plus carboplatin versus standard chemotherapy with either single agent carboplatin or cyclophosphamide doxorubicin, and cisplatin in women with ovarian cancer: the ICON3 randomised trial. *Lancet* 2002; 360:505-515.
2. ICON2: randomised trial of single agent carboplatin against three drug combination of CAP (cyclophosphamide, doxorubicin, and cisplatin) in women with ovarian cancer. ICON Collaborators. *International Collaborative Ovarian Neoplasm Study*. *Lancet* 1998;352(9140):1571-6.
3. Paclitaxel plus platinum based chemotherapy versus conventional platinum based chemotherapy in women with relapsed ovarian cancer: The ICON4/AGOVAR2.2 trial. *Lancet* 2003; 361 (9375): 2099-2106.
4. Bolis G, Scarfone G, Giardina G, Villa A, Mangili G, Melpignano M, et al. Carboplatin alone vs carboplatin plus epidoxorubicin as second line chemotherapy for cisplatin or carboplatin sensitive ovarian cancer. *Gynecol Oncol* 2001;81:39.

## REGIMEN SUMMARY

### Carboplatin (AUC6) 6 Cycles

#### Day One

1. Dexamethasone 8mg oral or intravenous  
Administration Instructions  
Administer 15-30 minutes prior to SACT. This may be given as dexamethasone 8mg IV stat or equivalent dose as required.
2. Ondansetron 8mg oral or intravenous  
Administration Instructions  
Administer 15-30 minutes prior to SACT. This may be given as ondansetron 8mg IV stat if required.
3. Carboplatin AUC 6 intravenous infusion in 500ml glucose 5% over 60 minutes.

#### Take Home Medicines

4. Dexamethasone 4mg oral twice a day for 3 days starting the day after chemotherapy  
Administration Instructions  
Take with or after food, starting on day two of the cycle.
5. Metoclopramide 10mg oral three times a day when required for nausea.  
Administration Instructions  
When required for the relief of nausea. Please supply five days or an original pack as appropriate.

## DOCUMENT CONTROL

Version	Date	Amendment	Written By	Approved By
1.2	June 2022	Name Changed Blood transfusion changed Dose banding changed to national dose bands Dose rounding removed Maximum dose 890mg added Coding removed Administration instructions added	Dr Deborah Wright Pharmacist	Dr Deborah Wright Pharmacist
1.1	April 2014	Maximum dose of carboplatin added Bolus removed from intravenous bolus Metoclopramide dose changed to 10mg from 10-20mg Disclaimer updated	Dr Deborah Wright Pharmacist	Donna Kimber Pharmacy Technician
1	May 2013	None	Rebecca Wills Pharmacist  Dr Deborah Wright Pharmacist	Dr Clare Green Consultant Medical Oncologist  Dr Cheng Yeoh 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.