

Chemotherapy Protocol
GYNAECOLOGICAL CANCER
TOPOTECAN INTRAVENOUS
(1, 2, 3, 4, 5)

Regimen

- Ovary – Topotecan (1, 2, 3, 4, 5)

Indication

- Second-line or subsequent treatment of platinum-refractory or platinum-resistant ovarian cancer, or in women who are allergic to platinum-based compounds, for whom pegylated liposomal doxorubicin and single-agent paclitaxel are considered inappropriate.
- WHO performance status 0,1, 2
- Palliative intent

Toxicity

Drug	Adverse Effect
Topotecan	Myelosuppression, alopecia, diarrhoea, anorexia, abdominal pain, pruritis

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

Monitoring

Drugs

- FBC, LFTs and U&Es prior to day 1 of each cycle
- CA125 prior to day 1 of 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 cycle 1 the following criteria must be met;

Criteria	Eligible Level
Neutrophil	equal to or more than $1.5 \times 10^9/L$
Platelets	equal to or more than $100 \times 10^9/L$

Haemoglobin should reach 9g/dL prior to each cycle. Support with blood transfusions if necessary.

Day 1

Neutrophils ($\times 10^9/L$)	Dose Modifications (topotecan)
1.5 or greater	100%
1-1.5	Delay until recovery to $1.5 \times 10^9/L$ or greater then continue with a dose of $1.25 \text{mg}/\text{m}^2$
Less than 1	Seek advice
Platelets ($\times 10^9/L$)	Dose Modifications
100 or greater	100%
less than 100	Delay until recovery to $100 \times 10^9/L$ or greater then continue with a dose $1.25 \text{mg}/\text{m}^2$ if the platelet count fell below $25 \times 10^9/L$ or symptomatic bleeding occurred.

Hepatic Impairment

Drug	Bilirubin ($\mu\text{mol}/L$)	Dose (% of original dose)
Topotecan	less than 170	100%
	170 or greater	Clinical decision

Renal Impairment

Drug	Creatinine Clearance (ml/min)	Dose (% of original dose)
Topotecan	40 or greater	100%
	20-39	50%
	less than 20	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.

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 3mg/m² or discontinued as appropriate.

Regimen

21 day cycle for 6 cycles

Drug	Dose	Days	Administration
Topotecan	1.5mg/m ²	1, 2, 3, 4, 5	Intravenous infusion in 100ml sodium chloride 0.9% over 30 minutes

Dose Information

- Topotecan dose will be rounded to the nearest 0.4mg (up if halfway).

Administration Information

Extravasation

- Topotecan – exfoliant

Additional Therapy

- Antiemetics

15 – 30 minutes prior to chemotherapy

- dexamethasone 8mg oral or intravenous
- metoclopramide 10mg oral or intravenous

As take home medication

- metoclopramide 10mg oral three times a day as required
- 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 (OPCS 4.6)

- Procurement – X71.3
- Delivery – X72.1, X72.4

References

1. Sehouli J, Stengel D, Harter P et al. Topotecan Weekly Versus Conventional 5-Day Schedule in Patients With Platinum-Resistant Ovarian Cancer: A Randomized Multicenter Phase II Trial of the North-Eastern German Society of Gynecological Oncology Ovarian Cancer Study Group. *J Clin Oncol* 2011; 29 (2): 242-248.
2. Gordon A, Fleagle J, Guthrie D et al. Recurrent epithelial ovarian carcinoma: a randomized phase III study of pegylated liposomal doxorubicin versus topotecan. *J Clin Oncol* 2001; 19(14): 3312-3322.
3. Ten Bokkel Huinink W, Gore M, Carmichael J et al. Topotecan versus paclitaxel for the treatment of recurrent epithelial ovarian cancer. *J Clin Oncol* 1997; 15 (6): 2183-2193.
4. NICE Guidance TA91 - Ovarian cancer (advanced) - paclitaxel, pegylated liposomal doxorubicin hydrochloride and topotecan (review). May 2005

REGIMEN SUMMARY

Topotecan (1, 2, 3, 4, 5)

Day 1, 2, 3, 4, 5

1. Dexamethasone 8mg oral or intravenous
2. Metoclopramide 10mg oral or intravenous
3. Topotecan 1.5mg/m² intravenous infusion in 100ml sodium chloride 0.9% over 30 minutes.

Take Home Medicines (day 1 only)

4. Metoclopramide 10mg oral three times a day when required for nausea.

DOCUMENT CONTROL

Version	Date	Amendment	Written By	Approved By
1.1	April 2014	IV removed from name Bolus removed from intravenous bolus throughout text Metoclopramide dose changed to 10mg from 20mg OPCS codes updated 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.