Oral Cyclophosphamide for Ovarian Cancer

Indication
Relapsed ovarian cancer

Regimen details
Cyclophosphamide 50mg once daily

Cycle frequency
Six weeks on – 1 week off

Number of cycles
Until disease progression

Administration
Cyclophosphamide tablets should be taken daily preferably in the morning, swallowed whole with a full glass of water. Patients should be encouraged to increase oral fluid intake to at least 2 litres per day to reduce the time that the drug remains in the bladder.

Pre-medication
None

Emetogenicity
Mild/moderate – use prn metoclopramide. Patients may report a "churning" sensation in the stomach. This may be a manifestation of gastritis which may respond better to H_2 antagonists or PPIs than antiemetics.

Additional supportive medication
Mesna can be added to the supportive treatment for haemorrhagic cystitis if required as a daily oral dose

Extravasation
N/A

Investigations – pre first cycle

Investigation	Validity period
FBC	14 days
U+E (including creatinine)	14 days
LFT (including AST)	14 days
Calcium	14 days
Phosphate	14 days
CA125	14 days

Investigations –pre subsequent cycles
FBC, U+E (including creatinine), every two weeks for the first 6 weeks and then every 4 weeks
LFTs, CA125 every 4 weeks
CT scan every 3-4 cycles
Medical/chemo CNS review before each cycle

Standard limits for administration to go ahead

If blood results not within range, authorisation to administer **must** be given by prescriber/ consultant.

Investigation	Limit
Neutrophil count	≥ 1.5 x 10^9/L
Platelet count	≥ 100 x 10^9/L
Creatinine clearance	≥ 60 mL/min
Bilirubin	≤ 1.0 x ULN
AST	< 1.5 x ULN

Dose modifications

Consider treatment gap and/or a dose reductions if neutrophils <1.5, Platelets <100 at the start of the cycle or if neutropenic fever.

Adverse effects –

for full details consult product literature/ reference texts

- **Serious side effects**

Infections
Second malignancy
Febrile neutropenia
Myelosuppression
Haemorrhagic cystitis
Pulmonary toxicity
Cardiotoxicity
Veno-occlusive liver disease

- **Frequently occurring side effects**

Nausea
Immunosuppression
Mucosal inflammation
Hepatotoxicity
Asthenia
Infertility

- **Other side effects**

Alopecia

Significant drug interactions

– for full details consult product literature/ reference texts

Cyclophosphamide is inactive but is metabolised in the liver into active metabolites mainly by CYP2A6, 2B6, 2C9, 2C19 and 3A4.

Any drugs which inhibit these enzymes may cause a decrease in the activation of cyclophosphamide and thus an decrease in efficacy. Conversely, any drug which induces these enzymes may cause an increase in toxicity

Additional comments

References

Cyclophosphamide SPC - https://www.medicines.org.uk/emc/product/3525/smpc

THIS PROTOCOL HAS BEEN DIRECTED BY DR YIANNAKIS, CONSULTANT HAEMATOLOGIST

RESPONSIBILITY FOR THIS PROTOCOL LIES WITH THE HEAD OF SERVICE

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