

## Treosulfan (gynae)

### Indication

Palliative treatment of advanced or relapsed ovarian, fallopian tube or primary peritoneal cancer.

### ICD-10 codes

Codes pre-fixed with C48, 56 and 57.

### Regimen details

Day	Drug	Dose	Route
1-7	Treosulfan	500mg TDS	PO

Consider reducing dose to 500mg BD and/or for 5 days duration if performance status  $\geq 2$ .

### Cycle frequency

28 days

### Number of cycles

Usual maximum 6 cycles.

### Administration

Treosulfan is available as 250mg capsules. The dose should be swallowed whole, with a glass of water. Stomatitis may occur if capsules are chewed.

If vomiting occurs an additional dose should **not** be taken and the next dose taken as planned.

Patients should be advised to drink plenty of fluids to reduce the risk of developing haemorrhagic cystitis.

### Pre-medication

Nil

### Emetogenicity

This regimen has low emetic potential.

### Additional supportive medication

Nil

### Extravasation

N/A

### Investigations – pre first cycle

Investigation	Validity period
FBC	14 days
U+E (including creatinine)	14 days
LFTs	14 days
CA125	Baseline

### Investigations – pre subsequent cycles

Investigation	Validity period
FBC	96 hours
U+E (including creatinine)	7 days
LFTs	7 days

### Standard limits for administration to go ahead

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

Investigation	Limit
Neutrophils	$\geq 1.5 \times 10^9/L$
WCC	$\geq 3.0 \times 10^9/L$
Platelets	$\geq 100 \times 10^9/L$
Creatinine clearance	$\geq 30\text{mL/min}$
Bilirubin	$< 1.5 \times \text{ULN}$

### Dose modifications

- Haematological toxicity**

If neutrophils  $< 1.5 \times 10^9/L$ , and/or WCC  $< 3.0 \times 10^9/L$  and/or platelets  $< 100 \times 10^9/L$  delay until recovery and continue at a reduced dose of 500mg BD for 7 days.

If febrile neutropenia reduce dose to 500mg BD for all future cycles.

- Renal impairment**

CrCl (mL/min)	Treosulfan dose
$\geq 30$	100%
$< 30$	60%

- Hepatic impairment**

No information available, discuss with consultant.

- Other toxicities**

If any grade 3 toxicity withhold treatment until  $\leq$  grade 1 and then continue at 500mg BD for 7 days. If recurs consider further dose reduction, discuss with consultant.

If any grade 4 toxicity withhold treatment and discuss with consultant.

If allergic alveolitis or pulmonary fibrosis develops treosulfan should be discontinued.

### Adverse effects - for full details consult product literature/ reference texts

- Serious side effects**

Myelosuppression  
 Cardiomyopathy  
 Allergic alveolitis, pulmonary fibrosis

- Frequently occurring side effects**

Myelosuppression  
 Stomatitis, mucositis  
 Alopecia  
 Nausea and vomiting  
 Haemorrhagic cystitis

- **Other side effects**

Electrolyte disturbances  
Hypoglycaemia  
Rash  
Fatigue  
Flu-like symptoms  
Skin pigmentation

**Significant drug interactions** – for full details consult product literature/ reference texts

**Warfarin/coumarin anticoagulants:** Avoid use due to elevations in INR. Switch to low molecular weight heparin during treatment.

**Ibuprofen, chloroquine:** Concomitant administration of treosulfan may reduce levels.

### Additional comments

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### References

- Summary of Product Characteristics Treosulfan (Medac) accessed 13 April 2016 via [www.medicines.org.uk](http://www.medicines.org.uk)
- Reed NS, Poole CJ, Coleman R, Parkin D, Graham JD, Kaye SJ, et al. A randomised comparison of treosulfan and carboplatin in patients with ovarian cancer: A study by the Scottish Gynaecological Cancer Trials Group (SGCTG) Eur J Cancer 2006; 42 (2): 179-185.
- Meier W, du Bois A, Reuss A, Kuhn W, Olbricht S, Gropp M, et al. Topotecan versus treosulfan, an alkylating agent, in patients with epithelial ovarian cancer and relapse within 12 months following 1st-line platinum/paclitaxel chemotherapy. A prospectively randomized phase III trial by the Arbeitsgemeinschaft Gynaekologische Onkologie Ovarian Cancer Study Group (AGO-OVAR) Gynecol Oncol 2009; 114 (2): 199-205

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Written/reviewed by: Dr Kate Scatchard (Consultant Oncologist, Royal Devon and Exeter Hospital)

Checked by: Sarah Murdoch (Senior Oncology Pharmacist, SW Strategic Clinical Network)

Authorised by: Dr J Braybrooke (Consultant Oncologist, UHBristol NHS Trust, SW Strategic Clinical Network)

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