Indication
Adjuvant treatment of stage one seminoma

Treatment of stage IIA or IIB seminoma with para-aortic radiotherapy – the carboplatin is administered first with radiotherapy usually starting after 3 to 4 weeks.

ICD-10 codes
Codes pre-fixed with C38, C48, C62, C63, C75.

Regimen details

<table>
<thead>
<tr>
<th>Day</th>
<th>Drug</th>
<th>Dose</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Carboplatin</td>
<td>AUC 7*</td>
<td>IV infusion</td>
</tr>
</tbody>
</table>

* Carboplatin dose calculated using the Calvert equation: \( \text{Carboplatin dose (mg)} = \text{AUC} \times (\text{CrCl} + 25) \)

An EDTA should be performed to measure the CrCl. If this is not possible a 24 hour urine collection should be performed to measure the CrCl.

Cycle frequency
N/A

Number of cycles
1 cycle only

Administration
Carboplatin is administered in 500mL glucose 5% over 30-60 minutes.

Patients should be observed closely for hypersensitivity reactions. Hypersensitivity reactions may occur within a few minutes following the initiation of the infusion of carboplatin. Facilities for the treatment of hypotension and bronchospasm must be available.

If hypersensitivity reactions occur, minor symptoms such as flushing or localised cutaneous reactions do not require discontinuation of therapy. The infusion may be temporarily interrupted and when symptoms improve restarted at a slower infusion rate. Chlorphenamine 10mg IV may be administered. Severe reactions, such as hypotension, bronchospasm or generalised rash/erythema require immediate discontinuation of carboplatin and appropriate therapy.

Pre-medication
None

Emetogenicity
This regimen has moderate - high emetic potential

Additional supportive medication
\( \text{H}_2 \) antagonist or proton pump inhibitor if required.
Mouthwashes as per local policy.
Anti-emetics as per local policy.
**Extravasation**
Carboplatin is an irritant (Group 3)

**Investigations – pre first cycle**

<table>
<thead>
<tr>
<th>Investigation</th>
<th>Validity period</th>
</tr>
</thead>
<tbody>
<tr>
<td>FBC</td>
<td>14 days</td>
</tr>
<tr>
<td>U+E (including creatinine)</td>
<td>14 days</td>
</tr>
<tr>
<td>LFTS</td>
<td>14 days</td>
</tr>
<tr>
<td>Magnesium</td>
<td>14 days</td>
</tr>
<tr>
<td>EDTA creatinine clearance</td>
<td>28 days</td>
</tr>
<tr>
<td>AFP, HCG, LDH</td>
<td>14 days</td>
</tr>
<tr>
<td>LH, FSH and testosterone</td>
<td>28 days</td>
</tr>
</tbody>
</table>

Where appropriate offer pre-treatment sperm storage.

**Investigations – pre subsequent cycles**
N/A

**Standard limits for administration to go ahead** If blood results not within range, authorisation to administer must be given by prescriber/consultant

<table>
<thead>
<tr>
<th>Investigation</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>WBC</td>
<td>≥ 3.0 x 10⁹/L</td>
</tr>
<tr>
<td>Neutrophils</td>
<td>≥ 1.0 x 10⁹/L</td>
</tr>
<tr>
<td>Platelets</td>
<td>≥ 100 x 10⁹/L</td>
</tr>
<tr>
<td>Creatinine Clearance (CrCl)</td>
<td>≥ 20mL/min</td>
</tr>
</tbody>
</table>

**Dose modifications**
- **Haematological toxicity**
  N/A
- **Renal impairment**
  Carboplatin is contra-indicated if CrCl <20mL/min.
- **Hepatic impairment**
  N/A

**Adverse effects** - for full details consult product literature/reference texts
- **Serious side effects**
  Myelosuppression
  Nephrotoxicity
  Ototoxicity
  Neurotoxicity
  Infertility
  Hypersensitivity reactions
- **Frequently occurring side effects**
  Myelosuppression
  Constipation, diarrhoea
  Stomatitis, mucositis
  Nausea and vomiting
● **Other side effects**
- Electrolyte disturbances
- Taste disturbance
- Fatigue

**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.

**Aminoglycoside antibiotics**: increased risk of nephrotoxicity and ototoxicity

**Clozapine**: increased risk of agranulocytosis, avoid concomitant use

**Diuretics**: increased risk of nephrotoxicity and ototoxicity

**Nephrotoxic drugs**: increased nephrotoxicity; not recommended

**Phenytoin**: carboplatin reduces absorption and efficacy of phenytoin

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**References**

- Oliver RT, Mason MD, Mead GM et al. Radiotherapy versus single dose carboplatin in adjuvant treatment of stage 1 seminoma: a randomised trial. Lancet 2005, 366; 293-300

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