Protocol: **Doxorubicin/Cisplatin**

Indications: Osteosarcoma - neoadjuvant

Schedule:

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose</th>
<th>iv/infusion/oral</th>
<th>q</th>
<th>Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doxorubicin</td>
<td>25mg/m²</td>
<td>iv bolus</td>
<td></td>
<td>Days 1, 2 &amp; 3</td>
</tr>
<tr>
<td>Cisplatin</td>
<td>50mg/m²</td>
<td>1L N. Saline/2hrs</td>
<td></td>
<td>Days 1 &amp; 2</td>
</tr>
</tbody>
</table>

Cycle frequency: Every three weeks  
Total number of cycles: 6  
(3 before surgery)

Dose modifications: Discuss with Consultant

Administration and safety:

- Anti-emetic group – High
- Delay if neutrophils < 1.5 x 10⁹/L or platelets < 100 x 10⁹/L
- Ensure adequate renal function
- Pre & post-hydration, mannitol, potassium & magnesium

Toxicities: Myelosuppression and risk of neutropenic sepsis or haemorrhage, nausea & vomiting, mucositis, alopecia, amenorrhea, cardiac toxicity, peripheral neuropathy, nephrotoxicity, ototoxicity, diarrhoea, carcinogenesis, infertility

Symptomatic treatment of side effects: Mouth care, encourage oral fluids

Investigations

Pre-treatment:

- History and Examination
- Performance score, weight, CXR
- FBC
- U & E’s, LFTs, Mg²⁺, Ca²⁺, creatinine, urate, creatinine clearance
- LDH
- ECG
- Staging investigations as per protocol

Prior to each cycle:

- Performance score, weight
- FBC
- U & E’s, LFTs, Mg²⁺, Ca²⁺, creatinine
- LDH
- CXR

Mid Treatment: After three cycles

Post Treatment: Review in Medical Oncology Clinic 4 weeks after last cycle

Protocol: **Ifosfamide**

Indications: Soft tissue sarcomas - Palliative

Schedule:

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose</th>
<th>iv/infusion/oral</th>
<th>q</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ifosfamide</td>
<td>3g/m²</td>
<td>1L N. Saline/4hrs</td>
<td>Days 1-3</td>
</tr>
</tbody>
</table>

Cycle frequency: Every three weeks  
Total number of cycles: 6

Dose modifications: Discuss with Consultant

Administration and safety:
- Anti-emetic group – High
- Delay if neutrophils < 1.5 x 10⁹/L or platelets < 100 x 10⁹/L
- Mesna dose guidelines

Toxicities: Myelosuppression and risk of neutropenic sepsis or haemorrhage, nausea & vomiting, mucositis, alopecia, cardiotoxicity, amenorrhoea, peripheral neuropathy, haemorrhagic cystitis, nephrotoxicity, encephalopathy, diarrhoea, carcinogenesis, infertility

Symptomatic treatment of side effects: Mouth care

Investigations

Pre-treatment:
- History and Examination
- Performance score, weight
- FBC
- U & E’s, LFTs, creatinine, urate
- LDH
- ECG
- Staging investigations as per protocol

Prior to each cycle:
- Performance score, weight
- FBC
- U & E’s, LFTs, creatinine
- LDH

Mid Treatment:  After every two cycles

Post Treatment: Review in Medical Oncology Clinic 4 weeks after last cycle

Protocol: **Adjuvant DI (Doxorubicin/Ifosfamide)**

Indications: Soft tissue sarcomas – adjuvant (high risk)

Schedule:

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose</th>
<th>iv/infusion/oral</th>
<th>q</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doxorubicin</td>
<td>60mg/m²</td>
<td>iv</td>
<td>Day 1</td>
</tr>
<tr>
<td>Ifosfamide</td>
<td>3g/m²</td>
<td>1L N. Saline/4hrs</td>
<td>Days 1-3</td>
</tr>
</tbody>
</table>

Cycle frequency: Every three weeks  Total number of cycles: 6

Dose modifications: Discuss with Consultant

Administration and safety:
- Anti-emetic group – High
- Delay if neutrophils < 1.5 x 10⁹/L or platelets < 100 x 10⁹/L
- Mesna dose guidelines
- Give prophylactic pegylated G-CSF on day 4

Toxicities: Myelosuppression and risk of neutropenic sepsis or haemorrhage, nausea & vomiting, mucositis, alopecia, cardiotoxicity, amenorrhoea, peripheral neuropathy, haemorrhagic cystitis, nephrotoxicity, encephalopathy, diarrhoea, carcinogenesis, infertility

Symptomatic treatment of side effects: Mouth care

Investigations
Pre-treatment:
- History and Examination
- Performance score, weight
- FBC
- U & E’s, LFTs, creatinine, urate
- Creatinine clearance
- LDH
- ECG
- Staging investigations as per protocol

Prior to each cycle:
- Performance score, weight
- FBC
- U & E’s, LFTs, creatinine
- LDH

Post Treatment: Review in Medical Oncology Clinic 4 weeks after last cycle

Reference: Frustaci *et al*, 2003. Oncology, 65 (Suppl 2); pages 80-84
Protocol: CYVADIC

Indications: Soft tissue sarcomas – Metastatic, Recurrent

Schedule:

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose</th>
<th>Route</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyclophosphamide</td>
<td>500mg/m²</td>
<td>iv/infusion</td>
<td>Day 1</td>
</tr>
<tr>
<td>Vincristine</td>
<td>1.5mg/m²</td>
<td>iv (max 2 mg)</td>
<td>Day 1</td>
</tr>
<tr>
<td>Doxorubicin</td>
<td>50mg/m²</td>
<td>iv</td>
<td>Day 1</td>
</tr>
<tr>
<td>Dacarbazine</td>
<td>850mg/m²</td>
<td>500mls N. Saline/1hr</td>
<td>Day 1</td>
</tr>
</tbody>
</table>

Cycle frequency: Every three weeks  Total number of cycles: 6

Dose modifications: Discuss with Consultant

Administration and safety:
- Anti-emetic group – High
- Delay if neutrophils < 1.5 x 10⁹/L or platelets < 100 x 10⁹/L
- Ensure adequate renal function

Toxicities: Myelosuppression and risk of neutropenic sepsis or haemorrhage, nausea & vomiting, mucositis, alopecia, cardiotoxicity, amenorrhoea, peripheral neuropathy, constipation, encephalopathy, haemorrhagic cystitis, nephrotoxicity, diarrhoea, carcinogenesis, infertility

Symptomatic treatment of side effects: Mouth care, encourage oral fluids

Investigations

Pre-treatment:
- History and Examination
- Performance score, weight
- FBC
- U & E’s, LFTs, creatinine, urate, creatinine clearance
- LDH
- ECG
- Staging investigations as per protocol

Prior to each cycle:
- Performance score, weight
- FBC
- U & E’s, LFTs, creatinine
- LDH

Mid Treatment: After every two cycles

Post Treatment: Review in Medical Oncology Clinic 4 weeks after last cycle

Protocol: **High dose Ifosfamide/Etoposide**

Indications: Sarcomas - adjuvant, recurrent

Schedule:

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose</th>
<th>Method</th>
<th>iv/infusion/oral</th>
<th>q</th>
</tr>
</thead>
<tbody>
<tr>
<td>Etoposide</td>
<td>100mg/m²</td>
<td>500mls N. Saline/1hr</td>
<td>Days 1-5</td>
<td></td>
</tr>
<tr>
<td>Ifosfamide</td>
<td>3g/m²</td>
<td>1L N. Saline/4hrs</td>
<td>Days 1-5</td>
<td></td>
</tr>
</tbody>
</table>

Cycle frequency: Every three weeks  Total number of cycles: 2

Dose modifications: Discuss with Consultant

Administration and safety:
- Anti-emetic group – High
- Delay if neutrophils < 1.5 x 10^9/L or platelets < 100 x 10^9/L
- With mesna (equivalent dose to ifosfamide over 24 hours)
- Continuous hydration with total 3 litres fluid/m² per day
- Pegylated G-CSF on day 6

Toxicities: Severe myelosuppression and risk of neutropenic sepsis or haemorrhage, nausea & vomiting, mucositis, alopecia, cardiotoxicity, amenorrhoea, peripheral neuropathy, haemorrhagic cystitis, nephrotoxicity, encephalopathy, diarrhoea, carcinogenesis, infertility

Symptomatic treatment of side effects: Mouth care

Investigations

Pre-treatment:
- History and Examination
- Performance score, weight
- FBC
- U & E’s, LFTs, creatinine, urate, creatinine clearance
- LDH
- ECG
- Staging investigations as per protocol

Prior to each cycle:
- Performance score, weight
- FBC
- U & E’s, LFTs, creatinine
- LDH

Post Treatment: Review in Medical Oncology Clinic 4 weeks after last cycle

Protocol: **Doxorubicin (Sarcoma)**

**Indications:** Sarcoma - palliative

**Schedule:**
- **Drug:** Doxorubicin
- **Dose:** 75mg/m²
- **Schedule:** iv/infusion/oral q.Day 1

**Cycle frequency:** Every three weeks  
**Total number of cycles:** 4-6

**Dose modifications:** Discuss with Consultant

**Administration and safety:**
- Anti-emetic group - Moderately High
- Delay if neutrophils < 1.5 x 10⁹/L or platelets < 100 x 10⁹/L
- Check liver function

**Toxicities:** Myelosuppression and risk of neutropenic sepsis or haemorrhage, nausea & vomiting, mucositis, alopecia, cardiotoxicity, amenorrhoea, carcinogenesis, infertility

**Symptomatic treatment of side effects:** Mouth care

**Investigations**

**Pre-treatment:**
- History and Examination
- Performance score, weight
- FBC
- U & E's, LFTs, creatinine, urate
- LDH
- ECG
- Staging investigations as per protocol

**Prior to each cycle:**
- Performance score, weight
- FBC
- U & E’s, LFTs, creatinine
- LDH

**Mid Treatment:** After every two cycles, if palliative

**Post treatment:** Review in Medical Oncology Clinic 3 weeks after the last cycle or at the start CMF as per protocol 13