Chemotherapy Protocol

SARCOMA

MIFAMURTIDE

Regimen

- Sarcoma-Mifamurtide

Indication

- Children, adolescents and young adults (30 years of age or less) with osteosarcoma where;

  - the tumour is high grade and non-metastatic and
  - they have had an operation to remove the tumour and
  - they are also having chemotherapy with multiple drugs

Toxicity

Drug	Adverse Effect
Mifamurtide	Tachycardia, hypertension/hypotension, dyspnoea, musculo-skeletal pain, tiredness

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 one of treatment

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

Dose modifications for haematological toxicity in the table below are for general guidance only. Always refer to the responsible consultant as any dose reductions or delays will be dependent on clinical circumstances and treatment intent.

Consider blood transfusion or erythropoietin if the patient is symptomatic of anaemia or has a haemoglobin of less than 8g/dL.

Platelets (x10^9/L)	Dose Modifications
Greater than or equal to 100	No dose modifications
less than 100	Please discuss with consultant

Hepatic Impairment

No data, treat with caution

Renal Impairment

No data, treat with caution

Other

For patients experiencing tiredness and flu like symptoms, these can be treated with paracetamol.

Increased risk of ototoxicity should be assessed if treatment is combined with cisplatin.

Regimen

7 day cycle for 12 cycles

Drug	Dose	Days	Administration
Mifamuratide	2mg/m^2	1, 4	Intravenous infusion in 100mls sodium chloride 0.9% over 60 minutes

Followed by

7 day cycle for 24 cycles

Drug	Dose	Days	Administration
Mifamuratide	2mg/m^2	1	Intravenous infusion in 100mls sodium chloride 0.9% over 60 minutes

Dose Information

- A total of 48 infusions are given over 36 weeks
- It should be administered as adjuvant therapy, in combination with post-operative multi- agent chemotherapy, following resection and recovery from surgery (approximately 3 weeks post operatively)
- Mifamurtide will be dose rounded to the nearest 0.08mg (up if halfway)

Administration Information

Extravasation

- Mifamurtide - neutral

Additional Therapy

- Mifamurtide is moderately emetogenic. No anti-emetics will be included in this regimen as it is given in combination with other cytotoxic chemotherapy. It should be noted that mifamurtide acts through stimulation of the immune system. The chronic or routine use of corticosteroids should, therefore, be avoided.

- Mouthcare for the prophylaxis or treatment of mucositis in accordance with local guidelines.

- Gastric protection with a proton pump inhibitor or a H_2 antagonist may be considered in patients considered at high risk of GI ulceration or bleed.

- Paracetamol and chlorpheniramine may be utilised as a premedication, to prevent fevers and chills. Corticosteroids, including dexamethasone, should be avoided.

Coding

- Procurement – X71.5

- Delivery – X72.2, X72.3, X72.4

References
1. Meyers PA, Schwartz CL, Krailo M et al. Osteosarcoma: A Randomized, Prospective Trial of the Addition of Ifosfamide and/or Muramyl Tripeptide to Cisplatin, Doxorubicin and High-Dose Methotrexate. J Clin Oncol 2005; 23(9): 2004-11.
2. National Institute of Health and Clinical Excellence. Technology Appraisal 235. Mifamurtide for the treatment of osteosarcoma. DOH:London

REGIMEN SUMMARY

Mifamurtide

Cycle 1 to 12 inclusive

Days 1, 4

1. Warning – Check Supportive treatments are prescribed
   Administration Instructions
   Mifamurtide is moderately emetogenic, please ensure sufficient antiemetic cover is prescribed on the day of treatment.
   Mifamurtide carries a risk of infusion related reactions please ensure PRN paracetamol and chlorphenamine are available on the prescription at doses appropriate to the age of the patient.

2. Mifamurtide 2mg/m^2 intravenous infusion in 100mls sodium chloride 0.9% over 60 minutes

Cycle 13 to 36 inclusive

Days 1

1. Warning – Check Supportive treatments are prescribed
   Administration Instructions
   Mifamurtide is moderately emetogenic, please ensure sufficient antiemetic cover is prescribed on the day of treatment.
   Mifamurtide carries a risk of infusion related reactions please ensure PRN paracetamol and chlorphenamine are available on the prescription at doses appropriate to the age of the patient.

2. Mifamurtide 2mg/m^2 intravenous infusion in 100mls sodium chloride 0.9% over 60 minutes

DOCUMENT CONTROL

Version	Date	Amendment	Written By	Approved By
1.1	Dec 2015	Regimen Summary: Warning changed and admin instructions added. Number of cycles updated. PRN paracetamol and chlorphenamine removed.	Rebecca Wills Pharmacist	Dr Deborah Wright Pharmacist
1	Sept 2015	None	Dr Deborah Wright Pharmacist	Dr Nicola Keay 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 NHS Foundation Trust
University Hospital Southampton NHS Foundation Trust
Western Sussex Hospitals NHS Trust

All actions have been taken to ensure these protocols are correct. However, it remains the responsibility of the prescriber to ensure the correct drugs and doses are prescribed for patients.