

# BCCA Protocol Summary for Ifosfamide for Use in Patients with Advanced Soft Tissue Sarcoma

**Protocol Code** SAAVI

**Tumour Group** Sarcoma

**Contact Physician** Dr. Meg Knowling

## ELIGIBILITY:

- Patients with an advanced soft tissue sarcoma
- Good performance status
- Adequate bone marrow, renal and hepatic function (bilirubin less than 2 x ULN)

## EXCLUSIONS:

- Untreated obstructive uropathy
- Extreme hypoalbuminemia
- Caution – solitary kidney

## TESTS:

- Baseline and before each treatment: CBC & diff, platelets, [lytes](#), creatinine, [calcium](#), bilirubin, AST, alk phos, GGT, LDH, [albumin](#) and clinical measure of tumour response
- [Urine dipstick for blood before each treatment as well as during treatment at hours 2, 16, 28 and 40 – if positive at any time, notify doctor and refer to supportive care protocol \[SCMESNA\]\(#\)](#)
- If clinically indicated: chest x-ray or other imaging to monitor response

## PREMEDICATIONS:

- Ondansetron 8 mg po/IV q 8 h x 3 doses (first dose pre-chemotherapy)
- Dexamethasone 8 mg po/IV pre-chemotherapy, then 4 mg po/IV q 12 h x 10 doses
- Lorazepam 1 mg SL q 4-6 h prn nausea, sleep or restlessness
- Prochlorperazine 10 mg po/IV q 4-6 h prn nausea and vomiting

**TREATMENT:**

Drug	Dose	BCCA Administration Guideline
Mesna	600 mg/m <sup>2</sup>	IV in 100 mL D5W over 15 minutes
Ifosfamide	5000 mg/m <sup>2</sup> /day	IV in 3 L of D5NS with Mesna 2500 mg/m <sup>2</sup> to infuse over 24 hr. Total dose to be divided equally between three 1 L bags with each litre to be run over 8 hr.
Mesna	1250 mg/m <sup>2</sup>	IV in 2 L of D5NS to infuse over 12 hr. Total dose to be divided equally between two 1 L bags with each litre to be run over 6 hr.
Furosemide	20 mg	IV at hour 16 and 28

Repeat every 21 days

**DOSE MODIFICATIONS:****1. Hematological:**

ANC (x10 <sup>9</sup> /L)		Platelets (x10 <sup>9</sup> /L)	Dose (all drugs)
greater than 1.5	and	greater than 100	100%
1.0-1.5	or	70-100	80%
less than 1.0	or	less than 70	Delay one week

2. **Renal Dysfunction:** If Day 1 serum creatinine increases greater than 100% or is greater than ULN, estimate creatinine clearance using the formula:

$$\text{Creatinine clearance} = \frac{N * (140 - \text{Age}) * \text{Weight (kg)}}{\text{Serum creatinine}}$$

\* For males N= 1.23; For females N=1.04

Cr <sub>Cl</sub> (mL/min)	
greater than or equal to 50	Continue with Ifosfamide
less than 50	Discontinue treatment with Ifosfamide

If Ifosfamide is discontinued mid-cycle because of decreasing renal function, Mesna infusion should be continued at a dose of 1250 mg/m<sup>2</sup> for 48 hours following ifosfamide discontinuation.

3. **Nausea & Vomiting:** Grade 4 despite optimal use of anti-emetics, reduce dose of all drugs to 80% or QUIT
4. **Febrile Neutropenia** (with ANC less than 0.5 x 10<sup>9</sup>/L): Once counts have recovered, reduce dose of all drugs to 80%

### **PRECAUTIONS:**

1. **Hematuria:** Refer to supportive care protocol [SCMESNA](#)
2. **CNS Toxicity:** Ifosfamide can cause encephalopathy with symptoms of drowsiness, hallucinations, confusion, seizures and coma. If drowsiness develops while receiving ifosfamide, discontinue all sedating medications and continue ifosfamide. If patient is confused, unarousable or comatose, discontinue ifosfamide. If ifosfamide is the cause of CNS depression, then it should not be given again. If the CNS changes are not due to ifosfamide, then ifosfamide can be reinstated providing the previous medications contributing to CNS toxicity are not given again with it. If a seizure occurs on ifosfamide, then that cycle is to be discontinued. Further cycles may be given if the patient is on anticonvulsants.
3. **Neutropenia:** Fever or other evidence of infection must be assessed promptly and treated aggressively. Refer to BCCA Febrile Neutropenia Guidelines.

**Call Dr. Meg Knowling or tumour group delegate at (604) 877-6000 or 1-800-663-3333 with any problems or questions regarding this treatment program.**

Date activated: 1 Sep 2008

Date revised: 1 Feb 2010 (Test clarified, furosemide added to Treatment section for diuresis)

### **References:**