

BCCA Protocol Summary for Adjuvant Therapy for Newly Diagnosed Ewing's Sarcoma/Peripheral Neuroectodermal Tumour (PNET) or Rhabdomyosarcoma With Pelvic Primaries or Chemotherapy Induced Hematuria Using Vincristine, Doxorubicin, Cyclophosphamide and Mesna (SAVACM is alternated with SAIME)

Protocol Code	<i>SAVACM</i>
Tumour Group	<i>Sarcoma</i>
Contact Physician	<i>Dr. Meg Knowling</i>

ELIGIBILITY:

- Newly diagnosed Ewing's Sarcoma/Peripheral Neuroectodermal Tumour or Rhabdomyosarcoma in pelvic sites where treatment includes pelvic radiotherapy
- Patients with hematuria due to Ifosfamide or Cyclophosphamide
- Good performance status
- Adequate bone marrow, liver and kidney function

TESTS:

- Baseline and before each treatment: CBC and diff, platelets, creatinine, bilirubin, AST, alkaline phosphatase, GGT, LDH and objective measure of tumour response
- [Urine dipstick for blood before each treatment and every 8 hours during treatment – if positive at any time, notify doctor and refer to supportive care protocol SCMESNA](#)
- If clinically indicated: ECG

PREMEDICATIONS:

- Antiemetic protocol for high-moderate emetogenic chemotherapy protocols (see [SCNAUSEA](#))
- [Lorazepam 1 mg SL every 4 to 6 hours as needed](#)
- [Prochlorperazine 10 mg po/IV every 4 to 6 hours as needed](#)
- [Nabilone 1 mg po every 6 to 8 hours as needed](#)

TREATMENT:

- Repeat every 6 weeks, alternating with SAIME every 3 weeks. For young patients, may repeat every 4 weeks, alternating with SAIME every 2 weeks.
- SAVACM is not given during radiotherapy. Repeat SAIME every 2 or 3 weeks until radiotherapy is completed.

Drug	Dose	BCCA Administration Guideline
Vincristine	1.5 mg/m ²	IV in 50 mL NS over 5-15 min (maximum dose = 2 mg)
Doxorubicin	75 mg/m ²	IV push
Cyclophosphamide	1200 mg/m ²	IV in 500 mL D5W-1/2 NS with Mesna 240 mg/m ² over 60 min
Mesna	240 mg/m ²	Hours 5 and 8: IV in 100 mL D5W over 15 min <u>OR</u> 480 mg/m ² PO in carbonated beverage

HYDRATION:

Hours 5 – 11	IV D5W-1/2 NS at 250 mL/h
Hours 11 – 24	IV D5W-1/2 NS at 125 mL/h If no hematuria and patient is drinking well, IV hydration may be discontinued at Hour 15.

DOSE MODIFICATIONS:

1. **Hematological:** Adjust Doxorubicin and Cyclophosphamide doses only

a. Pre-radiotherapy/pre-operative phase:

ANC (x10 ⁹ /L)		Platelets (x10 ⁹ /L)	Doses
greater than or equal to 0.5	and	greater than or equal to 100	100%
less than 0.5	or	less than 100	delay 1 week*

b. Post-radiotherapy/post-operative phase:

ANC (x10 ⁹ /L)		Platelets (x10 ⁹ /L)	Doses
greater than or equal to 0.75	and	greater than or equal to 100	100%
less than 0.75	or	less than 100	delay 1 week*

*if counts remain low after 1 week delay, consult Dr. Knowling for further dose modifications.

2. **Nausea & Vomiting:** If greater than 10 episodes of emesis post-chemotherapy despite optimal use of antiemetics and/or if parenteral fluid support is required, reduce dose of Cyclophosphamide and Doxorubicin to 80%
3. **Hepatic dysfunction:** Dose modifications may be required for Doxorubicin and Vinorelbine (see BCCA Cancer Drug Manual)
4. **Renal dysfunction:** Dose modification may be required for Cyclophosphamide (see BCCA Cancer Drug Manual).
5. **Neutropenic Fever** (with ANC less than $0.5 \times 10^9/L$): Once counts have recovered, reduce dose of Cyclophosphamide and Doxorubicin to 80%
6. **Hematuria:** Refer to [SCMESNA](#) protocol.

PRECAUTIONS:

1. **Cardiac Toxicity:** Doxorubicin is cardiotoxic and must be used with caution in patients with severe hypertension or cardiac dysfunction. Cardiac assessment is recommended if lifelong dose of 450 mg/m^2 is exceeded (see BCCA Cancer Drug Manual).
2. **Extravasation:** Doxorubicin and Vincristine cause pain and tissue necrosis if extravasated. Refer to BCCA Extravasation Guidelines.
3. **Neutropenia:** Fever or other evidence of infection must be assessed promptly and treated aggressively.

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

Date activated: **N/A**

Date revised: 1 Feb 2010 (Tests and premedications clarified)

References: