

BC Cancer Protocol Summary for the Treatment of Sarcomas with vinCRISTine, DOXOrubicin and Cyclophosphamide (SAVAC)

Protocol Code

SAVAC

Tumour Group

Sarcoma

Contact Physician

Dr. Christine Simmons

ELIGIBILITY:

- Ewing's sarcoma/peripheral neuroectodermal tumour or rhabdomyosarcoma – for whom alternating protocol is not appropriate
- Good performance status
- Adequate bone marrow, liver and kidney function

EXCLUSIONS:

- Pelvic primaries where bladder will receive radiotherapy (should treat with SAVACM)

TESTS:

- Baseline and before each treatment: CBC & Diff, creatinine, total bilirubin, ALT, alkaline phosphatase, GGT, LDH
- Urine dipstick for blood before each treatment – if positive at any time, notify doctor and send urine sample for urinalysis for verification and accurate determination of hematuria. If hematuria verified (ie 50 RBC/hpf on urinalysis report), switch to SAVACM.
- If clinically indicated: ECG

PREMEDICATIONS:

- Antiemetic protocol for highly emetogenic chemotherapy protocols (see [SCNAUSEA](#))

TREATMENT:

- Repeat every 3 weeks.
- SAVAC is not usually given during radiotherapy unless the tumour is extremity primary
- Admit for cycle one. If well tolerated, subsequent cycles can be given as an outpatient. Cycle one may be given as an outpatient as per clinician's clinical judgement.

Drug	Dose	BC Cancer Administration Guideline
vinCRISTine	1.5 mg/m ²	IV in 50 mL NS over 15 min (maximum dose = 2 mg)
DOXOrubicin	75 mg/m ²	IV push
cyclophosphamide	1200 mg/m ²	IV in 250 mL NS over 60 minutes

DOSE MODIFICATIONS:

1. **Hematological:** Adjust DOXOrubicin and cyclophosphamide doses only

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 a 1 week delay, consult Dr. Simmons 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 vinCRISTine (see BC Cancer Drug Manual)
4. **Renal dysfunction:** Dose modification may be required for cyclophosphamide (see BC Cancer Drug Manual).
5. **Neutropenic Fever** (with ANC less than $0.5 \times 10^9/\text{L}$): Once counts have recovered, reduce dose of cyclophosphamide and DOXOrubicin to 80%
6. **Hematuria:** Call Dr. Simmons– Use SAVACM for subsequent cycles

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 BC Cancer Drug Manual).
2. **Extravasation:** DOXOrubicin and vinCRISTine cause pain and tissue necrosis if extravasated. Refer to BC Cancer Extravasation Guidelines.
3. **Neutropenia:** Fever or other evidence of infection must be assessed promptly and treated aggressively.

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