BCCA Protocol Summary for Adjuvant Therapy for Rhabdomyosarcoma using vinCRISTine, DACTINomycin, Cyclophosphamide and Mesna

Protocol Code: SAVDCM

Tumour Group: Sarcoma

Contact Physician: Dr. Meg Knowling

ELIGIBILITY:
- Treatment of rhabdomyosarcoma\(^1,2\) instead of SAVACM or SAVDC
- Treatment of sarcomas\(^3\) where DOXOrubicin cumulative dose target has been reached using SAVACM
- Good performance status
- Adequate bone marrow, liver and kidney function
- Treatment of patients who develop hematuria on SAVDC

TESTS:
- Baseline and before each treatment: CBC & diff, platelets, creatinine, bilirubin, AST, Alkaline Phosphatase, GGT, LDH
- Urine dipstick for blood before each treatment and every 8 hours during treatment – if positive at any time, notify doctor and send urine sample for urinalysis and verification and accurate determination of hematuria - refer to supportive care protocol SCMESNA

PREMEDICATIONS:
- Antiemetic protocol for highly emetogenic chemotherapy protocols (see SCNAUSEA)

TREATMENT:
- Repeat every 3 weeks.
- May alternate every 2 or 3 weeks with SAIME
- SAVDCM is not given during radiotherapy; omit DACTINomycin and continue with vinCRISTine and cyclophosphamide until radiotherapy is completed.
- May be given as inpatient OR outpatient chemotherapy

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose</th>
<th>BCCA Administration Guideline</th>
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</thead>
<tbody>
<tr>
<td>vinCRISTine</td>
<td>1.5 mg/m(^2)</td>
<td>IV in 50 mL NS over 15 minutes (maximum dose = 2 mg)</td>
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<tr>
<td>DACTINomycin</td>
<td>40 mcg/kg</td>
<td>IV push (maximum dose = 2.5 mg)</td>
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<tr>
<td>mesna</td>
<td>240 mg/m(^2)</td>
<td>IV in 100 mL D5W over 15 minutes</td>
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<tr>
<td>cyclophosphamide</td>
<td>1200 mg/m(^2)</td>
<td>IV in 500 mL D5W-1/2 NS over 1 hour</td>
</tr>
<tr>
<td>mesna</td>
<td>240 mg/m(^2)</td>
<td>HR 5 and 8: IV in 100 mL D5W over 15 minutes OR 480 mg/m(^2) PO in carbonated beverage</td>
</tr>
</tbody>
</table>
**HYDRATION**:  
| Hours 1:45 to 11 | IV D5W-1/2 NS at 250 mL/hr |
| Hours 11 to 24 | IV D5 W-1/2 NS at 125 mL/hr. |
| | If no hematuria and patient is drinking well, IV hydration may be discontinued at Hour 15. |

**DOSE MODIFICATIONS:**
1. **Hematological:** Adjust DACTINomycin and cyclophosphamide doses only

<table>
<thead>
<tr>
<th>ANC (x10^9/L)</th>
<th>Platelets (x10^9/L)</th>
<th>Doses</th>
</tr>
</thead>
<tbody>
<tr>
<td>greater than or equal to 0.75</td>
<td>and</td>
<td>greater than or equal to 100</td>
</tr>
<tr>
<td>less than 0.75</td>
<td>or</td>
<td>less than 100</td>
</tr>
</tbody>
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*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 DACTINomycin and cyclophosphamide to 80%

3. **Hepatic dysfunction:** Dose modifications may be required for DACTINomycin and vinCRISTine (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 x 10^9/L): Once counts have recovered, either give 100% dosing with G-CSF coverage or reduce dose of DACTINomycin and cyclophosphamide to 80%

6. **Hematuria:** Refer to SCMESNA protocol.

**PRECAUTIONS:**
1. **Extravasation:** DACTINomycin and vinCRISTine cause pain and tissue necrosis if extravasated. Refer to BCCA Extravasation Guidelines.

2. **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.
References: