ELIGIBILITY:
- Good prognosis seminoma or nonseminoma (international consensus prognostic [Cambridge] classification) if there are contraindications for GUBEP
- AFP less than 1000 mcg/L and hCG less than 5000 unit/L and LDH less than 1.5 x normal
- or pure seminoma

EXCLUSIONS:
- Mediastinal primary nonseminoma
- Intermediate or poor prognosis testicular cancer according to the IGCCCG classification
- Inadequate renal function (calculated creatinine clearance less than 40 mL/min) (relative contraindication)
- Inadequate hematologic function

It is strongly recommended that all patients with metastatic germ cell tumours should be presented in GU tumour group conference.

TESTS:
- **Baseline**: CBC and differential, platelets, liver enzymes (including LDH), creatinine, electrolytes, magnesium, calcium, AFP, hCG, random glucose
- Consider baseline audiogram for pretreatment hearing impairment.
- Consider prechemotherapy sperm count and banking if fertility is an issue.
- **Before each cycle**: CBC and differential, platelets, creatinine, LDH, AFP, hCG, magnesium, electrolytes, random glucose
- Repeat CBC on day 5 if ANC on day 1 less than 1 x 10^9/L (not required on day 5 of the first cycle)
- Repeat creatinine on day 5 if creatinine on day 1 greater than the upper limit of normal
- Repeat abnormal tests every 21 days (scans optional if markers responding appropriately)

PREMEDICATIONS:
- Antiemetic protocol for highly emetogenic chemotherapy protocols (see SCNAUSEA).
- hydrocortisone and diphenhydrAMINE for history of hypersensitivity to etoposide
TREATMENT:

- Cycle length 21 Days regardless of ANC
- Duration: 4 cycles (3 cycles if adjuvant)

<table>
<thead>
<tr>
<th>Agent</th>
<th>Dose</th>
<th>BCCA Administration Standard</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Hydration</td>
<td></td>
<td>IV 1000 mL NS with 20 mEq potassium chloride and 2 g magnesium sulfate over 1 hour</td>
<td>days 1 to 5</td>
</tr>
<tr>
<td>etoposide</td>
<td>100 mg/m²</td>
<td>IV in 500 mL NS over 45 minutes (use non-DEHP equipment with 0.22 micron or smaller in-line filter)</td>
<td>days 1 to 5</td>
</tr>
<tr>
<td>CISplatin</td>
<td>20 mg/m²</td>
<td>IV in 100 mL NS over 30 minutes</td>
<td>days 1 to 5</td>
</tr>
<tr>
<td>Post-Hydration</td>
<td></td>
<td>IV 500 mL NS over 30 minutes</td>
<td>days 1 to 5</td>
</tr>
<tr>
<td>Total hydration</td>
<td></td>
<td>IV 2100 mL NS</td>
<td></td>
</tr>
</tbody>
</table>

NOTE: Treatment should be given on 5 consecutive days.

DOSE MODIFICATIONS:

- No dose reduction or delay is permitted for counts.
- This program is given with curative intent and any delay or dose reduction may have serious implications. In the event of elevated creatinine (e.g. greater than 200 micromol/L), neutropenic fever or low platelets, phone consultation with a contact physician is recommended.
- Prophylactic use of filgrastim is not recommended.
- Filgrastim is indicated in patients receiving their second or subsequent cycle of GUEP who have had an episode of neutropenic fever or who have not recovered their neutrophil count by Day 5.

PRECAUTIONS:

1. **Hypersensitivity**: Monitor infusion of etoposide for the first 15 minutes for signs of hypotension. Hypersensitivity reactions have also been reported for CISplatin. Refer to BCCA Hypersensitivity Guidelines.
2. **Extravasation**: Etoposide causes irritation if extravasated. Refer to BCCA Extravasation Guidelines.
3. **Neutropenia**: Fever or other evidence of infection must be assessed promptly and treated aggressively.
4. **Renal Toxicity**: Nephrotoxicity is common with CISplatin. Strongly encourage oral hydration. If oral hydration is not possible (e.g. excessive nausea), IV hydration is indicated. Avoid nephrotoxic drugs such as aminoglycoside antibiotics.

Contact Dr. Christian Kollmannsberger, Dr. Bernie Egl or tumour group delegate at (604) 877-2730 or 1-800-663-3333 with any problems or questions regarding this treatment program.
References: