BCCA Protocol Summary for Adjuvant Therapy for Stage I High Risk Seminoma Using CARBOplatin

Protocol Code
GUSCARB

Tumour Group
Genitourinary

Contact Physician
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Dr. Bernie Eigl

ELIGIBILITY:
- GU conferencing is recommended.
- High Risk Stage I Seminoma (see BCCA Cancer Management Manual for current definition)
- Calculated creatinine clearance (Cockcroft) greater than or equal to 50 mL/min.
- Relative or absolute contraindication to standard radiation

EXCLUSIONS:
- Contraindication to CARBOplatin such as clinical deafness.

TESTS:
- Baseline: CBC & diff, platelets, creatinine, liver function tests
- Day 14 and 21: CBC & diff, platelets,
- Before each treatment: CBC & diff, platelets, creatinine
- If clinically indicated: liver function tests

PREMEDICATIONS:
- Antiemetic protocol for high/moderate emetogenic chemotherapy protocols (see SCNAUSEA)

TREATMENT:

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose</th>
<th>BCCA Administration Guideline</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARBOplatin</td>
<td>dose (mg) = (AUC 7) x [GFR +25]</td>
<td>IV in 250 mL NS over 30 minutes</td>
</tr>
</tbody>
</table>

*Measured GFR* (e.g. nuclear renogram) is preferred whenever feasible, particularly in circumstances of co-morbidity that could affect renal function (third-space fluid accumulations, hypoproteinemia, potentially inadequate fluid intake, etc.). The lab reported GFR (MDRD formula) may be used as an alternative to the Cockcroft-Gault estimate of GFR; the estimated GFR reported by the lab or calculated using the Cockcroft-Gault equation should be capped at 125 mL/min when it is used to calculate the initial carboplatin dose. When a nuclear renogram is available, this clearance would take precedence.
Cockcroft-Gault Formula

\[
GFR = \frac{N \times (140 - \text{age in years}) \times \text{wt (kg)}}{\text{serum creatinine (micromol/L)}}
\]

Note: The *same* method of estimation should be used throughout the treatment course (i.e., if lab reported GFR was used initially, this should be used for dosing in all subsequent cycles and not the Cockcroft-Gault estimate).

*For males in = 1.23; for females N = 1.04

Repeat every 28 days x 2 cycles.

**DOSE MODIFICATIONS:**

1. **Creatinine:** Recalculate GFR and CARBOplatin dose at each cycle.
2. **Hematological:** On treatment day:

<table>
<thead>
<tr>
<th>ANC (x10^9/L)</th>
<th>Platelets (x10^9/L)</th>
<th>Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>greater than or equal to 1.2 AND greater than or equal to 120</td>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>less than 1.2 OR less than 120</td>
<td></td>
<td>delay 1 week or until recovery</td>
</tr>
</tbody>
</table>

**PRECAUTIONS:**

1. **Renal Toxicity:** Patients should maintain adequate hydration at home.
2. **Neutropenia:** Fever or other evidence of infection must be assessed promptly and treated aggressively.
3. **Subjective toxicity** may include nausea, vomiting; tinnitus, high frequency hearing loss; numbness and tingling in feet.
4. **Hypersensitivity:** Reactions to CARBOplatin may develop. Refer to BCCA Hypersensitivity Guidelines.

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

Date activated: 01 Nov 2001

Date revised: 1 May 2017 (Contact physician updated)

References: