

BC Cancer Protocol Summary for Consolidation and Salvage Therapy for Nonseminoma Using Etoposide, CISplatin, Ifosfamide, Mesna

Protocol Code

GUVIP2

Tumour Group

Genitourinary

Contact Physician

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ELIGIBILITY

Gonadal and Extragonadal Germ Cell Tumors

1. High Risk Presentation (international consensus prognostic [Cambridge] classification: see GUBEP protocol for definition)
 - GUVIP2 may be used as an alternative to GUBEP for contraindications to bleomycin/mediastinal GCT.
2. Evidence of resistance to induction:
 - a) Persistent markers
 - b) Viable pathology
 - c) Relapse post chemo

TESTS

- Repeat abnormal tests every 3 weeks (scans optional)
- Prior to each cycle: CBC and diff, platelets, creatinine, electrolytes panel, magnesium, bilirubin, albumin, hematuria, AFP, beta hCG tumour marker, mental status, random glucose.
- Urine dipstick pre-treatment and once daily during chemotherapy. If positive, notify MD - see supportive care protocol – SCMESNA
- Daily weight, input/output, vital signs every 8 hrs while admitted.
- Repeat CBC, diff, platelets and creatinine on day 5.
- CBC, differential, platelets days 10 and 14

PREMEDICATIONS:

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

TREATMENT:

Cycle length three weeks

| Hour | Agents | Days | | | | |
|-------------|---|------|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| 0 to 1.0 | etoposide 75 mg/m ² IV in 250 to 500 mL NS over 1 hour (use non-DEHP equipment with 0.2 micron in-line filter) | x | x | x | x | x |
| 1.0 to 1.5 | CISplatin 20 mg/m ² IV in 100 mL NS over 30 min | x | x | x | x | x |
| 1.5 to 1.75 | mesna 300 mg/m ² IV in 100 mL D5W over 15 min | x | x | x | x | |
| 2 to 3 | ifosfamide 1500 mg/m ² IV in 500 mL D5 ½ NS over 1 hour | x | x | x | x | |
| 7 | mesna 300 mg/m ² IV in 100 mL D5W over 15 min | x | x | x | x | |
| 11 | mesna 300 mg/m ² IV in 100 mL D5W over 15 min | x | x | x | x | |
| | OR Mesna 720 mg/m ² PO in carbonated beverage at Hour 5 and 9 (ie, 2 and 6 hours after the Ifosfamide) | x | x | x | x | |

Hydration at discretion of the oncologist.

SUPPORT MEDICATION:

furosemide 20 mg IV for urine output less than 500 mL over 4 hours

Optional: cotrimoxazole DS 1 PO BID x 10 days to start on Day 10.

OR If allergic, use ciprofloxacin 500 mg PO BID x 10 days to start on day 10.

OR filgrastim (G-CSF) support to avoid dose reductions or delays.

DOSE MODIFICATIONS

| | |
|---|---|
| Serum creatinine greater than 200 micromol/L: | prehydrate reduce ifosfamide by 25% |
| Serum creatinine greater than 300 micromol/L: | reduce CISplatin by 25% reduce ifosfamide by 33% |
| Neutropenic fever: | reduce etoposide by 25% |

- Delay one week if ANC less than $0.5 \times 10^9/L$ or platelets less than $50 \times 10^9/L$.
- Filgrastim (G-CSF) may be used for febrile neutropenia. Refer to Pharmacare Guidelines.

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 BC Cancer Hypersensitivity Guidelines.
2. **Extravasation:** Etoposide causes irritation if extravasated. Refer to BC Cancer Extravasation Guidelines.
3. **Neutropenia:** Fever or other evidence of infection must be assessed promptly and treated aggressively. Avoid aminoglycosides.
4. **Renal Toxicity:** Nephrotoxicity is common with CISplatin. Encourage oral hydration. Avoid nephrotoxic drugs such as aminoglycoside antibiotics.

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.

References:

Loehrer PJ, Lauer R, Roth BJ, et al. Salvage therapy in recurrent germ cell cancer: ifosfamide and cisplatin plus either vinblastine or etoposide. *Ann Int Med* 1988;109:540-6.