

# BC Cancer Protocol Summary for Therapy of Dysgerminomatous Ovarian Germ Cell Cancer using CISplatin and Etoposide

**Protocol Code**

GOEP

**Tumour Group**

Gynecology

**Contact Physician**

Dr. Anna Tinker

## ELIGIBILITY:

### Patients must have:

- Good prognosis (international consensus prognostic [Cambridge] classification)
- AFP less than 1000 mcg/L and serum beta hCG less than 5000 unit/L and LDH less than 1.5 x normal
- Pure dysgerminoma

### Note:

- Primary prophylaxis with G-CSF is not mandatory, but may be considered if patient has one or more of the following risk factors:
  - Prior chemotherapy or radiation therapy
  - Persistent neutropenia
  - Recent surgery and/or open wounds
  - Liver dysfunction
  - Renal dysfunction
  - Older than 65 years of age and receiving full chemotherapy dose intensity

## EXCLUSIONS:

### Patients must not have:

- Mediastinal primary non-dysgerminoma

## TESTS:

- Baseline: CBC & Diff, sodium, potassium, creatinine, magnesium, calcium, AFP, beta hCG tumour marker, total bilirubin, ALT, alkaline phosphatase, LDH
- Baseline if clinically indicated: GGT, audiogram (for pretreatment hearing impairment)
- Before each cycle: CBC & Diff, sodium, potassium, creatinine, magnesium, and repeat initially elevated markers (i.e., LDH, AFP, beta hCG tumour marker)
- Day 5 (all cycles except Cycle 1): CBC & Diff prior to chemotherapy if ANC on Day 1 less than  $1.0 \times 10^9/L$
- If clinically indicated: repeat any abnormal tests (scans optional if markers responding appropriately)

## PREMEDICATIONS:

Antiemetic protocol for highly emetogenic chemotherapy protocols. [Extended antiemetic prophylaxis may be considered for patients receiving a 5-day cisplatin regimen \(see SCNAUSEA\).](#)

## TREATMENT:

Drug	Dose	BC Cancer Administration Guideline
CISplatin	20 mg/m <sup>2</sup> /day x 5 days (Days 1 to 5)	IV in 100 mL NS over 30 minutes
etoposide	100 mg/m <sup>2</sup> /day x 5 days (Days 1 to 5)	IV in 250 to 1000 mL NS (non-DEHP bag) over 45 to 90 minutes (use non-DEHP tubing with 0.2 micron in-line filter)

Repeat every 21 days (regardless of ANC) x 4 cycles (3 cycles if adjuvant).

## DOSE MODIFICATIONS:

- No dose reduction or delay is permitted for counts, except omit Day 5 etoposide if WBC still not recovered (ANC less than  $1.0 \times 10^9/L$ ) by Day 5.
- This protocol 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.
- [Filgrastim is indicated in patients receiving their second or subsequent cycle of GOEP who have had an episode of neutropenic fever or who have not recovered their neutrophil count by Day 5.](#)

## PRECAUTIONS:

1. **Febrile Neutropenia:** Risk of febrile neutropenia is 10 to 20%. If a patient has additional risk factors outlined in Eligibility Note above, risk of febrile neutropenia may be considered to be greater than 20%; consider prophylactic filgrastim per discretion of the treating physician. Febrile neutropenia can result in serious patient harm, treatment delays, and hospitalization. Fever or other evidence of infection must be assessed promptly and treated aggressively.
2. **Extravasation:** Etoposide causes pain and tissue necrosis if extravasated. Refer to BC Cancer Extravasation Guidelines.
3. **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.
4. **Renal Toxicity:** Nephrotoxicity is common with CISplatin. Encourage oral hydration or use adequate IV hydration. Avoid nephrotoxic drugs such as aminoglycoside antibiotics.

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

**References:**

1. International germ cell consensus collaborative group. International germ cell consensus classification: a prognostic factor-based staging system for metastatic germ cell cancers. *J Clin Oncol* 1997;15:564-603.
2. Einhorn LH, Williams SD, Loehrer PJ, et al. Evaluation of optimal duration of chemotherapy in favorable-prognosis disseminated germ cell tumours: a Southeastern Cancer Study Group protocol. *J Clin Oncol* 1989;7:387-91.
3. de Wit R, Roberts JT, Wilkinson P, et al. Final analysis demonstrating the equivalence of 3 BEP vs 4 cycles and the 5 day schedule vs 3 days per cycle in good prognosis germ cell cancer. An EORTC/MRC phase III study. *Proc Am Soc Clin Oncol* 2000;19a:326a (abstract 1281).