

Bleomycin	15 mg/m <sup>2</sup>	iv.	d 1-3
		iv.	d 1-3

Literature:  
(34) Lopes LF et al. Cisplatin and etoposide in childhood germ cell tumor: Brazilian Pediatric Oncology Society protocol GCT-91. J. Clin. Oncol. 27 (2009): 1297-1303

10.3

Pediatric Intergroup Studies POG 9048/CCG 8891<sup>(35)</sup> and POG9049/CCG 8892<sup>(34)</sup>

Bleomycin	15 U/m <sup>2</sup>	iv. (20 min inf)	d 1-3
Etoposide	100 mg/m <sup>2</sup> /d	iv.	d 1-3
Cisplatin	20 mg/m <sup>2</sup> /d	iv.	d 1-3

To be repeated every 3 weeks (4 cycles). Doses for infants <12 months were calculated by weight: bleomycin 0.5 mg/kg/dose, etoposide 3 mg/kg/dose, cisplatin 0.7 mg/kg/dose.

Literature:  
(35) Rogers PC et al. Treatment of children and adolescents with stage II testicular and stages I and II ovarian malignant germ cell tumors: a Pediatric intergroup study. Pediatric Oncology Group 9048 and Children's Cancer Group 8891. J. Clin. Oncol. 22 (2004): 3563-3569

10.4

PEI<sup>(36)</sup>

Courses 1 and 3

Carboplatin	600 mg/m <sup>2</sup>	iv.	d 1
Etoposide	150 mg/m <sup>2</sup> /d	iv.	d 1-3

Courses 2 and 4

Cyclophosphamide	1800 mg/m <sup>2</sup> /d	iv.	d 21-23
		with mesna uroprotection	
Etoposide	150 mg/m <sup>2</sup> /d	iv.	d 21-23

After chemotherapy, radiation therapy (46 Gy in total at 1.8 Gy/fraction over 4.5 weeks) was given.

Literature:  
(36) Bouffet E et al. Combined treatment modality for intracranial germinomas: results of a multicentre SFOP experience. Société Française d'Oncologie Pédiatrique. Br. J. Cancer 79 (1999): 1199-1204

10.5

JEB<sup>(37,38)</sup>

Etoposide	120 or 150 mg/m <sup>2</sup> /d	iv. (1 h inf)	d 1-3
Carboplatin	600 mg/m <sup>2</sup>	iv. (1 h inf)	d 2
Bleomycin	10 or 15 mg/m <sup>2</sup>	iv. (15 min inf)	d 3

To be repeated every 3-4 weeks until remission plus 2 additional courses.  
\* Or calculated using the formula  $6 \times (\text{uncorrected GFR} \times (15 \times \text{surface area}))$ .

11.5

Risk-adapted carboplatin-based regimen<sup>(39)</sup>  
Low-risk group: A → B → A → B, every 3 week intervals

A

Carboplatin	450 mg/m <sup>2</sup>	iv.	d 0
Etoposide	150 mg/m <sup>2</sup> /d	iv.	d 0-2

Two cycles

B

Etoposide	150 mg/m <sup>2</sup> /d	iv.	d 0-2
Cyclophosphamide	1000 mg/m <sup>2</sup>	iv.	d 0,1
		with mesna uroprotection	

Two cycles.

High-risk group: A' → B' → A' → B', every 3 week intervals

A'

Carboplatin	450 mg/m <sup>2</sup>	iv.	d 0,1
Etoposide	150 mg/m <sup>2</sup> /d	iv.	d 0-2
Bleomycin	15 mg/m <sup>2</sup>	iv.	d 2

Two cycles

B'

Etoposide	150 mg/m <sup>2</sup> /d	iv.	d 0-2
Cyclophosphamide	2000 mg/m <sup>2</sup>	iv.	d 0,1
		with mesna uroprotection	

Bleomycin 15 mg/m<sup>2</sup>

Two cycles

Literature:  
(39) Ji S et al. Response and adverse effects of carboplatin-based chemotherapy for pediatric intracranial germ cell tumors. Korean J. Pediatr. 54 (2011): 128-132

10.7

CE + radiotherapy<sup>(40)</sup>

Carboplatin	300 mg/m <sup>2</sup>	iv.	d 1,2
Etoposide	150 mg/m <sup>2</sup> /d	iv.	d 1-3

To be repeated every 3 weeks (4 cycles)

Radiation therapy (whole ventricular irradiation) 21.5-25.5 Gy (1.8 Gy/d in 12 fractions or 1.7 Gy/d in 15 fractions) with a simultaneous integrated or sequential primary site boost to 30-30.8 Gy

Radiation therapy was initiated usually 3-4 weeks after chemotherapy.

Literature:  
(40) Khatri S et al. Treatment of primary CNS germinomatous germ cell tumors with chemotherapy prior to reduced dose whole ventricular and local boost irradiation. Pediatr. Blood Cancer 55 (2010): 42-46

JEP