

BC Cancer Protocol Summary for Lomustine (CCNU) for Treatment of Recurrent Malignant Brain Tumours

Protocol Code

CNCCNU

Tumour Group

Neuro-Oncology

Contact Physician

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ELIGIBILITY:

Patients must have:

- Recurrent malignant gliomas

Patients should have:

- ECOG 0-2
- [Adequate](#) hematological, hepatic and renal function

TESTS:

- Baseline: CBC and differential, platelets, creatinine, serum glucose (patients on dexamethasone), ALT, bilirubin, neuroimaging
- [Prior to each cycle](#): CBC and differential, ALT, bilirubin, creatinine
- [Prior to](#) day 28 of each cycle: CBC and differential, platelets
- Neuroimaging every second (ie, odd-numbered) cycle (BEFORE #1, 3, 5, etc)
- After 6 cycles: Pulmonary function tests if further treatment considered

PREMEDICATIONS:

- Antiemetic protocol for Low emetogenicity chemotherapy (see protocol SCNAUSEA)

TREATMENT:

Drug	Dose*	BC Cancer Administration Guideline
Iomustine (CCNU)	110 mg/m ² or 130 mg/m ² on Day 1 every 6 weeks** (round dose to closest 10 mg)	PO at bedtime on empty stomach

*Use 110 mg/m² for patients who have received prior alkylators (eg temozolomide)

** This time interval may need to be modified with repeated courses

- Assess after 6 cycles. Further treatment associated with increased risk of pulmonary toxicity. Consider pulmonary function tests if further treatment considered.
- Discontinue lomustine for progressive disease or intolerable side effects.

DOSE MODIFICATIONS:

1. Hematological:

ANC (x10⁹/L)		Platelets (x10⁹/L)	Dose
greater than or equal to 1.5	and	greater than or equal to 100	give 100%
1.0 to less than 1.5	and/or	80 to less than 100	give 80%*
less than 1.0	and/or	less than 80	delay until ANC greater than or equal to 1.5 AND Platelets greater than or equal to 100 Resume at 60% of original dose (Note: this will be the new 100% dose thereafter)*

* If more than 2 delays, CONSULT contact physician.

2. Renal dysfunction:

Creatinine clearance(mL/min)	Dose
greater than or equal to 50	100%
10 to less than 50	75%
less than 10	50%

- If serum creatinine greater than 150 micromol/L, reconsider the use of lomustine.

3. Hepatic dysfunction: If ALT greater than 5 x ULN or bilirubin greater than 25 micromol/L, hold chemotherapy until liver function returns to normal.

PRECAUTIONS:

- 1. Neutropenia:** Fever or other evidence of infection must be assessed promptly and treated aggressively.
- 2. A vomited dose** should not be repeated if it occurs more than 30-45 minutes after the dose.
- 3. Pulmonary toxicity** has been reported at cumulative doses usually greater than 1100 mg/m²; however it has also occurred with lower doses.

Call Dr. [Rebecca Harrison](#) or tumour group delegate at (604) 877-6000 or 1-800-663-3333 with any problems or questions regarding this treatment program.