

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

Protocol Code

CNCCNU

Tumour Group

Neuro-Oncology

Contact Physician

Dr. Brian Thiessen

ELIGIBILITY

1. Recurrent malignant gliomas
2. ECOG 0-2
3. Normal hematological, hepatic and renal function

TESTS

- Baseline: CBC and differential, platelets, serum creatinine, serum glucose (patients on dexamethasone), ALT, bilirubin.
- Baseline Neuroimaging
- Before each treatment:
 - Day 1: CBC and differential, ALT, bilirubin, serum creatinine
 - Day 28: 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/Moderate emetogenic chemotherapy (see protocol SCNAUSEA)

TREATMENT:

Drug	Dose*	BCCA Administration Guideline
lomustine (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 (x10 ⁹ /L)		Platelets (x10 ⁹ /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 1 week and resume at 60% of the 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. Brian Thiessen or tumour group delegate at (604) 877-6000 or 1-800-663-3333 with any problems or questions regarding this treatment program.