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

Protocol Code

Tumour Group

Contact Physician

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
lomustine (CCNU)	110 mg/m² or 130 mg/m² 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

BC Cancer Protocol Summary CNCCNU Page 1 of 3 Activated: N/A Revised: 1 Feb 2022 (eligibility and tests clarified, contact revised) Warning: The information contained in these documents are a statement of consensus of BC Cancer Agency professionals regarding their views of currently accepted approaches to treatment. Any clinician seeking to apply or consult these documents is expected to use independent medical judgement in the context of individual clinical circumstances to determine any patient's care or treatment. Use of these documents is at your own risk and is subject to BC Cancer's terms of use available at www.bccancer.bc.caferms-of-use.

CNCCNU

Neuro-Oncology

Dr. Rebecca Harrison

- 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 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.

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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.