PPO FOR THE TREATMENT OF BURKITT LYMPHOMA AND LEUKEMIA

LYIVAC (Magrath B) + R (riTUXimab)
[To be used after LYCODOX-M (Magrath A) + R]

DAY	DATE	CHEMOTHERAPY
1	_____	Start signature sheet and dexamethasone 0.1% eye drops[1] pre cytarabine
		cytarabine 2000 mg/m^2 IV q12h at 1000h and 2200h ifosfamide 1500 mg/m^2 IV at 1200h MESNA 375 mg/m^2 IV qid at 1130h, 1700h, 2000h, 2300h etoposide 60 mg/m^2 IV at 1400h
2	_____	cytarabine 2000 mg/m^2 IV q12h at 1000h and 2200h ifosfamide 1500 mg/m^2 IV at 1200h MESNA 375 mg/m^2 IV qid at 1130h, 1700h, 2000h, 2300h etoposide 60 mg/m^2 IV at 1400h
3	_____	ifosfamide 1500 mg/m^2 IV at 1200h MESNA 375 mg/m^2 IV qid at 1130h, 1700h, 2000h, 2300h etoposide 60 mg/m^2 IV at 1400h
4	_____	riTUXimab 375 mg/m^2 IV (or 1400 mg subcutaneous if IV tolerated) ifosfamide 1500 mg/m^2 IV at 1200h MESNA 375 mg/m^2 IV qid at 1130h, 1700h, 2000h, 2300h etoposide 60 mg/m^2 IV at 1400h
5	_____	ifosfamide 1500 mg/m^2 IV at 1200h MESNA 375 mg/m^2 IV qid at 1130h, 1700h, 2000h, 2300h etoposide 60 mg/m^2 IV at 1400h
6	_____	methotrexate 12 mg Intrathecal, if platelets greater than or equal to 50 x 10^9/L, INR less than 1.5, and PTT less than or equal to upper limit of normal.
> 18	_____	methotrexate 12 mg Intrathecal, after day 18, once platelets greater than or equal to 50 x 10^9/L, INR less than 1.5, and PTT less than or equal to upper limit of normal

NOTES:

1. Continue dexamethasone 0.1% eye drops until 48 hours after last dose of cytarabine

2. All chemotherapy doses are calculated using actual body weight

3. One staff physician signature is required. Orders written by other providers MUST be cosigned.

PROTOCOL CODE: LYIVAC (MAGRATH B) + R (riTUXimab) CHEMOTHERAPY REGIMEN

REMINDER: Please ensure drug allergies and previous bleomycin are documented on the Allergy & Alert Form.

Date/Time: Cycle #:

Admit to inpatient bed

❑ **GENERAL CONSENT SIGNED**

LABORATORY:

Before each treatment: CBC & diff, platelets, creatinine, sodium, potassium, ALT, bilirubin, alkaline phosphatase, GGT, uric acid, LDH, urine dipstick for blood

Daily q am during treatment: CBC & diff, platelets, creatinine, sodium, potassium

Every Monday and Thursday during treatment: ALT

Daily q am until 48 hours after completion of ifosfamide: urine dipstick for blood. If positive at any time, notify doctor and send urine sample for urinalysis for verification and accurate determination of hematuria.

Before each IT methotrexate (on Day 6 and after Day 18): PTT, INR, Platelets

PREMEDICATIONS:

For Day 1 to 5 IVAC portion:

- **ondansetron 8 mg** PO/IV pre-chemotherapy, then every 12 hours until day 5
- **dexamethasone 12 mg** PO pre-chemotherapy daily until day 5

For Day 4 riTUXimab portion:

- See riTUXimab pre-printed order

dimenhyDRINATE 50mg IV q 6 h prn

Complete G-CSF (filgrastim) pre-printed order form

Complete Febrile Neutropenia pre-printed order form

NOTE: One staff Physician signature is required. Orders written by other providers MUST be cosigned.

Doctor 1 Signature: **Doctor 2 Signature:**

Signatures

UC:

RN:

LYIVAC (MAGRATH B) + R (riTUXimab) CHEMOTHERAPY REGIMEN

REMINDER: Please ensure drug allergies and previous bleomycin are documented on the Allergy & Alert Form.

Date/Time:

CHEMOTHERAPY:

On _____ _____ (day 1) at 0600h or at least 4 hours before starting chemotherapy, start IV hydration with D5W ½ NS + _____ mEq potassium chloride/L + _____ g magnesium sulfate/L at 125 mL/h (3000 mL/day).

On_____ (day 1) at 1000h or at least 4 hours after start of hydration, give **cytarabine** _____mg (2000 mg/m^2) in 100 mL NS IV over 2 hours. Repeat q12h for a total of 4 doses (_____, _____).

dexamethasone 0.1% ophthalmic drops 2 drops in each eye q6h, starting immediately before first dose of cytarabine and continuing until 48 hours after the last dose of cytarabine.

Start signature screening sheet for cytarabine cerebellar toxicity.

On _____ (day 1) at 1200h, give **ifosfamide** _____mg (1500 mg/m^2) in 500 mL NS IV over 2 hours. Repeat daily for a total of 5 days (_____, _____, _____, _____, _____).

On _____ (day 1), 30 minutes prior to ifosfamide dose, give **MESNA** _____mg (375 mg/m^2) in 100 mL D5W IV over 15 minutes, then repeat at 3, 6 and 9 hours after ifosfamide dose (i.e., 4 doses/day for a total of MESNA 1500 mg/m^2/day). Repeat daily for a total of 5 days (_____, _____, _____, _____, _____).

On _____ (day 1) at 1400h, give **etoposide** _____ mg (60 mg/m^2) in 250 to 500 mL (non-DEHP bag) NS IV over 45 minutes (use non-DEHP tubing with 0.2 micron in-line filter). Repeat daily for a total of 5 days (_____, _____, _____, _____, _____).

NOTE: One staff Physician signature is required. Orders written by other providers MUST be cosigned.

Doctor 1 Signature: **Doctor 2 Signature:**

Signatures

UC:

RN:

LYIVAC (MAGRATH B) + R (riTUXImab) CHEMOTHERAPY REGIMEN

Date/Time:

CHEMOTHERAPY (Cont'd):

On _____ (day 4), give **riTUXimab** 375mg/m^2 – Complete attached **LYIVACR – riTUXimab Treatment** pre-printed order form.

On _____ (day 6) at _____h, have **methotrexate** 12 mg at bedside for intrathecal instillation, if platelet recovery greater than or equal to 50 x 10^9/L, INR less than 1.5, and PTT less than or equal to ULN – Complete attached **LYIVAC-IT** pre-printed order form.

methotrexate 12 mg also to be given via intrathecal instillation after day 18, once platelet count is greater than or equal to 50 x 10^9/L, INR less than 1.5, and PTT less than or equal to ULN – Complete attached **LYIVAC-IT** pre-printed order form.

A total of 8 doses of intrathecal chemotherapy should be given during the course of all treatments, 2 doses per cycle of chemotherapy, then the concluding doses, 1 dose per week, after all other treatments are complete.

SUPPORTIVE CARE: On _____ (day 7), start **fluconazole 400 mg PO DAILY**	DATE:
For HSV seropositive: On _____ (day 7), start valACYclovir 500 mg PO BID **OR acyclovir _____ mg (5 mg/kg) IV q12h. Please use the oral route, if the patient can swallow.**	DATE:
On _____ (day 7), start filgrastim as per pre-printed order, and continue until ANC greater than 1. Complete filgrastim (G-CSF) pre-printed order form.	DATE:
NOTE: One staff Physician signature is required. Orders written by other providers MUST be cosigned. **Doctor 1 Signature:** **Doctor 2 Signature:**	**Signatures** **UC:** **RN:**

DOCTOR'S ORDERS **Ht_____cm Wt_____kg BSA_____m^2**

DATE:

Date of Previous Cycle:

☐ Delay treatment _____ week(s).
☐ **CBC & Diff and Platelets** on the day of treatment.
Proceed with treatment based on blood work from _____.

PREMEDICATIONS:

For intravenous riTUXimab infusion:
diphenhydrAMINE 50 mg PO prior to **riTUXimab IV** and then q 4 h if IV infusion exceeds 4 h
acetaminophen 650 mg to 975 mg PO prior to **riTUXimab IV** and then q 4 h if IV infusion exceeds 4 h

For subcutaneous riTUXimab injection:
diphenhydrAMINE 50 mg PO prior to **riTUXimab subcutaneous**
acetaminophen 650 mg to 975 mg PO prior to **riTUXimab subcutaneous**

☐ **Other:**

****Have Hypersensitivity Tray and Protocol Available****

TREATMENT: (Continued)

On _____ (day 4):

ADJUNCTIVE CHEMOTHERAPY, use Actual BSA

riTUXimab (first dose) 375 mg/m^2 x BSA = _____ mg
IV in 250 to 500 mL NS over 3 to 8 hours (may divide dose equally into 2 x 250 mL NS.

Pharmacy to select riTUXimab IV brand as per Provincial Systemic Therapy Policy III-190

Drug	Brand (Pharmacist to complete. Please print.)	Pharmacist Initial and Date
riTUXimab		

TREATMENT #1:

Start at 50 mg/h. After 60 minutes, increase rate by 50 mg/h every 30 minutes until rate = 400 mg/h unless toxicity occurs.

For first dose, patients are to be under constant visual observation during all dose increases and for 30 minutes after infusion completed. Vital signs are not required, unless symptomatic.

NOTE: One staff Physician signature is required. Orders written by other providers MUST be cosigned.

Doctor 1 Signature: **Doctor 2 Signature:**

Signatures
UC:
RN:

Date:

TREATMENT: (Continued)

FOR ALL SUBSEQUENT TREATMENTS:

☐ Patient tolerated a full dose of IV riTUXimab (no severe reactions requiring early termination) and can proceed to subcutaneous riTUXimab:

riTUXimab subcut (RITUXAN SC) 1400 mg (fixed dose in 11.7 mL) subcutaneously into abdomen over 5 minutes.
Observe for 15 minutes after administration.

NB: During treatment with subcutaneous riTUXimab, administer other subcutaneous drugs at alternative injection sites whenever possible.

☐ Patient did not tolerate a full dose of IV riTUXimab (experienced severe reactions requiring early termination) in the previous treatment and will continue with IV riTUXimab for this cycle:

riTUXimab 375 mg/m^2 x BSA = _____ mg
IV in 250 to 500 mL NS.

Pharmacy to select riTUXimab IV brand as per Provincial Systemic Therapy Policy III-190

Drug	Brand (Pharmacist to complete. Please print.)	Pharmacist Initial and Date
riTUXimab		

Infuse 50 mL (or 100 mL of 500 mL bag) of the dose over 30 minutes, then infuse the remaining 200 mL (or 400 mL of 500 mL bag) over 1 hour.

If flushing, dyspnea, rigors, rash, pruritus, vomiting, chest pain, any other new acute discomfort or exacerbation of any existing symptoms occur, stop infusion and page physician.

For all subsequent doses, constant visual observation is not required.

NOTE: One staff Physician signature is required. Orders written by other providers MUST be cosigned.

Doctor 1 Signature: **Doctor 2 Signature:**

Signatures
UC:
RN:

PROTOCOL CODE: LYIVAC -IT

REMINDER: Please ensure drug allergies and previous bleomycin are documented on the Allergy & Alert Form.

Date/Time:

INTRATHECAL (IT) CHEMOTHERAPY: (BY PHYSICIAN ONLY)

☐ **methotrexate** 12 mg IT (intrathecal) qs to 6 mL with *preservative-free* NS on _____ (day 6), if platelets greater than or equal to 50 x 10^9/L, INR less than 1.5, and PTT less than or equal to ULN

☐ **methotrexate** 12 mg IT (intrathecal) qs to 6 mL with *preservative-free* NS on _____ (after day 18), if platelets greater than or equal to 50 x 10^9/L, INR less than 1.5, and PTT less than or equal to ULN

DO NOT GIVE MORE THAN ONE IT (intrathecal) MEDICATION at any given time.

Bed rest for 30 minutes after procedure in supine position.

For intrathecal (IT) chemotherapy:

☐ Prophylactic dalteparin: none night prior and resume the day after the procedure

☐ Therapeutic dalteparin *: MD to write separate order for holding therapeutic anticoagulation according to the following guidelines:

- Once daily therapeutic low molecular weight heparin should be held 36 hours prior to the procedure and resumed the day after the procedure
- In patients at high risk of thrombosis (e.g., acute thrombosis, less than 30 days from diagnosis of VTE), MD may consider changing to BID dosing and giving half the therapeutic dose of low molecular weight heparin at 24 hours prior to the procedure, and resuming the day after the procedure

☐ See General order sheet for additional requests.

DOCTOR'S SIGNATURE: (ONE SIGNATURE REQUIRED)	**Signatures:** **UC:** **RN:**

MEDICATION VERIFICATION CHECKS

Full Signatures Required

Medication/Route	Day 6	Day _____ (after day 18)
Date (dd/mm/yyyy)		
methotrexate 12mg IT	(RN)	(RN)
	(MD)	(MD)