PROTOCOL CODE: LYCODOXMR

PPPO FOR THE TREATMENT OF BURKITT LYMPHOMA AND LEUKEMIA

LYCODOX-M (Magrath A) + R (riTUXimab)

[To be used before LYIVAC (Magrath B) + R]

PATIENT'S NAME:

_____ _____ _____

LAST NAME **FIRST NAME** **INITIAL**

DIAGNOSIS: _____

DAY	DATE	CHEMOTHERAPY
1	_____	cyclophosphamide 800 mg/m^2 IV at 1000h DOXOrubicin 50 mg/m^2 IV at 1200h vinCRIStine 1.4 mg/m^2 (max 2 mg) IV at 1400h
2	_____	cyclophosphamide 800 mg/m^2 IV at 1000h
3	_____	cytarabine 50 mg Intrathecal, if no peripheral blasts, 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
8	_____	riTUXimab 375 mg/m^2 IV (or 1400 mg subcutaneous if IV tolerated) vinCRIStine 1.4 mg/m^2 (max 2 mg) IV at 1400h
10	_____	methotrexate 3 g/m^2 IV, if urinary pH greater than 7.0
18 +	_____	cytarabine 50 mg Intrathecal, if no peripheral blasts, 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

NOTE:

1. All chemotherapy doses are calculated using actual body weight
2. One staff physician signature is required. Orders written by other providers MUST be cosigned.

PROTOCOL CODE: LYCODOX-M (MAGRATH A) + R CHEMOTHERAPY REGIMEN	
ALLERGY/ALERT: Reminder to Physicians: *Please ensure that drug allergies and previous bleomycin use are documented on the Allergy and Alert Form.*	
Date/Time:	
Cycle #:	
Admit to inpatient bed ❑ **GENERAL CONSENT SIGNED**	
LABORATORY: **Before Day 1 of each cycle:** CBC & diff, creatinine, electrolytes panel, ALT, total bilirubin, alkaline phosphatase, GGT, uric acid, LDH **Daily q am during treatment:** CBC & diff, creatinine, electrolytes panel **Before IT chemo (day 3 and after day 18 when IT chemo is given)**: Platelets, PTT, INR **Twice weekly (Monday and Thursday)**: ALT, total bilirubin **Day 8**: ALT, bilirubin, alkaline phosphatase, GGT ☐ **If clinically indicated starting Day 11**: daily ALT, total bilirubin, alkaline phosphatase, LDH, GGT **At hour 48** (from start of methotrexate infusion) **or morning of day 12, then daily q am:** methotrexate levels (until less than 0.1 micromol/L; note date and time of withdrawal on the specimen.) **Immediately pre-methotrexate and q6h:** urine pH	
PREMEDICATIONS: For Day 1 and 2 CODOX-M portion: **dexamethasone 12 mg** PO 30 to 60 minutes pre-chemotherapy on days 1 and 2 and **select** ONE of the following: ☐ **ondansetron 8 mg** PO 30 to 60 minutes pre-chemotherapy, then 8 mg PO every 12 hours on days 1 and 2 ☐ **aprepitant 125 mg** PO 30 to 60 minutes pre-chemotherapy on day 1, then 80 mg PO daily on days 2 and 3 **ondansetron 8 mg** PO 30 to 60 minutes pre-chemotherapy, then 8 mg PO every 12 hours on days 1 and 2 ☐ **prochlorperazine 10 mg** PO q 6 h prn on days 1 and 2 ☐ **metoclopramide 10 mg** PO q 6 h prn on days 1 and 2 ☐ **dimenhyDRINATE 50 mg** PO/IV q 6 h prn on days 1 and 2 For Day 8 riTUXimab portion: See riTUXimab pre-printed orders For Day 10 CODOX-M portion: **ondansetron** 8 mg PO/IV pre-chemotherapy. **prochlorperazine** 10 mg PO after methotrexate infusion completed, then 10 mg PO q4h PRN.	
Complete filgrastim (G-CSF) 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:**

LYCODOX-M (MAGRATH A) + R CHEMOTHERAPY REGIMEN

Date/Time:	

CHEMOTHERAPY:

On _____ (day 1) at 0600h, start IV hyperhydration with NS with **potassium chloride** _____ mEq/L and **magnesium sulfate** _____ g/L at _____mL/h (3000 mL/m^2/day), and continue until 48 hours after last dose of cyclophosphamide, then decrease rate to 125 mL/h.

Measure Q4H in/out, while patient on hyper-hydration. If output is less than 400 mL during a 4 hour period, give **furosemide** 20 mg IV q4h PRN Days 1 to 4.

On _____ (day 1) at 1000hr, give **cyclophosphamide** _____mg (800 mg/m^2) in 100-250 mL mL NS IV over 30 to 60 minutes and repeat daily for a total of 2 days, day 1 and 2 (_____ , _____).

Furosemide 20 mg IV after the completion of each dose of cyclophosphamide. Urine hemastix once daily.

On _____ (day 1) at 1200hr, give **DOXOrubicin** _____ mg (50 mg/m^2) IV push.

On _____ (day 1) and _____ (day 8) at 1400hr, give **vinCRIStine** _____ mg (1.4 mg/m^2, max 2 mg) in 50 mL NS IV over 15 min.

If no peripheral blasts present, platelets greater than 50 x 10^9/L, INR less than 1.5, and PTT less than or equal to upper limit of normal. on _____ (day 3) at _____ hr, have **cytarabine** 50 mg at bedside for intrathecal instillation. Complete attached **LYCODOX-M-IT** pre-printed order form.

On _____ (day 8), consider **riTUXimab** 375 mg/m^2 – Complete attached **LYCODOXM (+R) – riTUXimab Treatment** pre-printed order form.

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

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

Signatures

UC:

RN:

LYCODOX-M (MAGRATH A) + R CHEMOTHERAPY REGIMEN	
Date/Time:	
CHEMOTHERAPY (Cont'd): On _____(day 10) at 0600h, discontinue all other IV fluid hydration and start IV D5W with **potassium chloride** 20 mEq/L and **sodium bicarbonate** 150 mEq/L at 125 mL/h for at least 4 hours prior to methotrexate until urine pH is greater than 7. Hydration may be temporarily held during methotrexate infusion (per physician/nursing discretion). Continue hydration post-methotrexate infusion until methotrexate level is less than 0.1 micromol/L. At 1000h, check urinary pH, SCr, ALT, ALP, GGT, bilirubin, and for the presence of significant fluid third spacing prior to starting methotrexate. If urinary pH is greater than 7, proceed with methotrexate as below. If urinary pH is less than 7, recheck urinary pH with each void. If urinary pH is greater than 7, give **methotrexate** _____g (3 g/m^2) IV in 1000 mL NS over 4 hours. Record the time at which the methotrexate infusion starts: _____hour. This is time zero. Urine pH Q6H until leucovorin rescue complete - if pH less than 7, notify MD. Give **leucovorin** 25 mg IV Q6H x 4 doses, starting at hour 24 (i.e., 20 hours after the methotrexate infusion ends), then continue with **leucovorin** 25 mg PO Q6H x 3 days. Check serum methotrexate level at hour 48 (or morning of day 12). Physician to adjust leucovorin rescue and order further methotrexate levels as per protocol. Discontinue **leucovorin**, once methotrexate level is less than 0.1 micromol/L.	
SUPPORTIVE CARE: On _____ (day 12), start **fluconazole 400 mg PO DAILY.**	**DATE:**
If HSV seropositive: On _____ (day 12), 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 13), start **filgrastim** as per pre-printed order form 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**_____**m²**

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 Reaction Tray and Protocol Available****

TREATMENT (CONTINUED):

DAY 8:

ADJUNCTIVE-CHEMOTHERAPY, use Actual BSA

riTUXimab (first dose) 375 mg/m2 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 1 hour, 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:

DOCTOR'S ORDERS

Ht_____cm Wt_____kg BSA_____m^2

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: LYCODOX-M-IT
Date/Time:
CHEMOTHERAPY: (BY PHYSICIAN ONLY)
☐ **cytarabine** 50 mg IT (intrathecal) qs to 6 mL with *preservative-free* NS on _____ (day 3) if no peripheral blasts, platelets greater than 50 x 10^9/L, INR less than 1.5 and PTT less than or equal to ULN.
☐ **cytarabine** 50 mg IT (intrathecal) qs to 6 mL with *preservative-free* NS on _____ (after day 18) if no peripheral blasts, platelets greater than 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.
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	DATE (DD/MM/YYYY)	SIGNATURES
cytarabine 50 mg IT (intrathecal)	**DAY 3:**	**RN:**
		MD:
	DAY _____ (after day 18):	**RN:**
		MD: