

UNIVERSITY HOSPITALS BIRMINGHAM NHS FOUNDATION TRUST

Document Code:	H-ROTA191a	Written by:	Amitpal Atwal
Issue No:	2.0	Issue date:	Sept 2018
Page:	1 of 6	Valid until:	Next review

Patient label:

Hb	Na ⁺	Alb	Height
WCC	K ⁺	Bili	Weight
Nts	U	AlkPhos	S.A.
Pit	Cr	ALT	
	GFR		
	Ca		
	Mg		

Ref: HOVON 127 BL protocol, Dec 2013 / NCRI R-CODOX-M/IVAC protocol May 2011

Lymphoma:
R-CODOX-M (Truxima®)
(≤65 years old)

Indication: Burkitt's Lymphoma , DLBCL with high IPI, double hit lymphoma.
 Two cycles each of alternating R-CODOX-M and R-IVAC will be given followed by two further doses of Rituximab (on days 21 and 42 of the 2nd IVAC schedule)
 Start cycle 2 of R-CODOX-M on first day after R-IVAC that the neutrophil count is >1x10⁹/l and platelet count is >75x10⁹/l

DAY NO. DATE	DRUG or ELECTROLYTE	CALCULATION	DOSE	I.V. FLUID	VOLUME (ml)	FLOW RATE	SPECIAL DIRECTIONS	DRUG ADMINISTRATION sig. sig.	TIME
1	DEXAMETHASONE PARACETAMOL		8mg 1000mg	PO PO			30-60 minutes pre-rituximab		
	CHLORPHENIRAMINE		8mg		N/Saline	500	see page 6		
	RITUXIMAB (Truxima®)	375mg/m ²		IV STAT					
	DOXORUBICIN	40mg/m ²							
	VINCRISTINE	1.5mg/m ²		N/SALINE	50	10 mins	Maximum 2mg		
	CYCLOPHOSPHAMIDE	800mg/m ²		N/SALINE	500	30 mins			
2	CYCLOPHOSPHAMIDE	200 mg/m ²		N/SALINE	250	30 mins			
	Intrathecal cytarabine due - please prescribe using H-ROTA 114								
3	CYCLOPHOSPHAMIDE	200 mg/m ²		N/SALINE	250	30 mins			
4	CYCLOPHOSPHAMIDE	200 mg/m ²		N/SALINE	250	30 mins			
	Intrathecal cytarabine due - please prescribe using H-ROTA 114								
5	CYCLOPHOSPHAMIDE	200 mg/m ²		N/SALINE	250	30 mins			
6	Intrathecal cytarabine due - please prescribe using H-ROTA 114 Cycle 1 only and only if patient has proven or suspected CNS disease								
8	VINCRISTINE	1.5mg/m ²		N/SALINE	50	10 mins	Maximum 2mg		

Prescriber Sig.

Date: Chemo Nurse Sig.

Date: Pharmacist Sig. Date: Date: Date:

Date: Pharmacist Sig.

Date: Date: Date:

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HAEMATOLOGY CHEMOTHERAPY PRESCRIPTION

Authorised By:	Consultant Sridhar Chaganti
Clinical Nurse Specialist Nicola Jones	
Pharmacist Nicola Marchant	

Lymphoma:
R-CODOX-M (Truxima®)
(≤65 years old)

DAY NO. DATE	DRUG OR ELECTROLYTE	CALCULATION	DOSE	I.V. FLUID	VOLUME (ml)	FLOW RATE	SPECIAL DIRECTIONS	DRUG ADMINISTRATION sig.	TIME
10 Line 2	Potassium chloride		20mmol	D/SALINE	1000	4 hours	Commence methotrexate when urine pH>7, but not before 8 hours of pre-hydration.		
	Sodium bicarbonate		50mmol						
	Potassium chloride		20mmol	D/SALINE	1000	4 hours			
	Sodium bicarbonate		50mmol						
Line 1	METHOTREXATE*	300mg/m ²		N/SALINE	250	1 hour	Give simultaneously with methotrexate		
	METHOTREXATE*	2700mg/m ²		N/SALINE	1000	23 hours			
	Potassium chloride		20mmol	D/SALINE	1000	4 hours			
	Sodium bicarbonate		50mmol						
Line 2	Potassium chloride		20mmol	D/SALINE	1000	4 hours			
	Sodium bicarbonate		50mmol						
	Potassium chloride		20mmol	D/SALINE	1000	4 hours			
	Sodium bicarbonate		50mmol						
11	Potassium chloride		20mmol	D/SALINE	1000	4 hours	30-60 minutes pre-rituximab		
	Sodium bicarbonate		50mmol	D/SALINE	1000	4 hours			
	Potassium chloride		20mmol	D/SALINE	1000	4 hours			
	Sodium bicarbonate		50mmol						
DEXAMETHASONE		8mg	PO						
PARACETAMOL		1000mg	PO						
CHLORPHENAMINE		8mg	PO						
RITUXIMAB (Truxima®)		375mg/m ²		N/Saline	500	see page 6			

Prescriber Sig.

Date: Chemo Nurse Sig.

Date: Pharmacist Sig.

Date: Date: Pharmacist Sig.

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Page:	3 of 6	Valid until:	Next review

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HAEMATOLOGY CHEMOTHERAPY PRESCRIPTION

Authorised By:	Consultant Sridhar Chaganti
Clinical Nurse Specialist	Nicola Jones
Pharmacist	Nicola Merchant

Lymphoma:

R-CODOX-M (Truxima®)
(≤65 years old)

DAY NO. DATE	DRUG or ELECTROLYTE	CALCULATION	DOSE	I.V. FLUID	VOLUME (ml)	FLOW RATE	SPECIAL DIRECTIONS	DRUG ADMINISTRATION sig. sig.	TIME
11 Line 2	Potassium chloride Sodium bicarbonate		20mmol 50mmol	D/SALINE	1000	4 hours	Give simultaneously with methotrexate		
	Potassium chloride Sodium bicarbonate		20mmol 50mmol	D/SALINE	1000	4 hours			
	Potassium chloride Sodium bicarbonate		20mmol 50mmol	D/SALINE	1000	4 hours			
	Potassium chloride Sodium bicarbonate		20mmol 50mmol	D/SALINE	1000	4 hours			
	Potassium chloride Sodium bicarbonate		20mmol 50mmol	D/SALINE	1000	4 hours			
	Potassium chloride Sodium bicarbonate		20mmol 50mmol	D/SALINE	1000	4 hours			
	FOLINIC ACID (Calcium Folinate)	15mg/m ²		IV STAT					

Start folinic acid 36 hours after methotrexate commenced. Subsequent doses to be prescribed on PICs – 15mg/m² 3-hourly for a further 4 doses, then change frequency to 6 hourly and continue until levels <0.1μmol/l. See table on page 6 for details of dose modifications based on MTX levels. Consider giving po after the first 24 hours if patient is not vomiting

Potassium chloride	20mmol	D/SALINE	1000	4 hours	
Sodium bicarbonate	50mmol				

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Pharmacist Sig. Date:

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Page:	4 of 6	Valid until:	Next review

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DAY NO. DATE	DRUG or ELECTROLYTE	CALCULATION	DOSE	I.V. FLUID	VOLUME (ml)	FLOW RATE	SPECIAL DIRECTIONS	DRUG ADMINISTRATION sig. sig.	TIME
12 Line 2	Potassium chloride Sodium bicarbonate		20mmol 50mmol	D/SALINE	1000	4 hours	Ensure methotrexate levels are checked at 48 hours. Continue fluids until MTX levels <1x10 ⁻⁷ M (0.1μmol/l).		
	Potassium chloride Sodium bicarbonate		20mmol 50mmol	D/SALINE	1000	4 hours			
	Potassium chloride Sodium bicarbonate		20mmol 50mmol	D/SALINE	1000	4 hours			
	Potassium chloride Sodium bicarbonate		20mmol 50mmol	D/SALINE	1000	4 hours			
	Potassium chloride Sodium bicarbonate		20mmol 50mmol	D/SALINE	1000	4 hours			
	Potassium chloride Sodium bicarbonate		20mmol 50mmol	D/SALINE	1000	4 hours			
	Potassium chloride Sodium bicarbonate		20mmol 50mmol	D/SALINE	1000	4 hours			
13 Line 2	Potassium chloride Sodium bicarbonate		20mmol 50mmol	D/SALINE	1000	4 hours	Ensure methotrexate levels are checked every 24 hours until levels <1x10 ⁻⁷ M (0.1μmol/l).		
	Potassium chloride Sodium bicarbonate		20mmol 50mmol	D/SALINE	1000	4 hours			
	Potassium chloride Sodium bicarbonate		20mmol 50mmol	D/SALINE	1000	4 hours			
	Potassium chloride Sodium bicarbonate		20mmol 50mmol	D/SALINE	1000	4 hours			
	Potassium chloride Sodium bicarbonate		20mmol 50mmol	D/SALINE	1000	4 hours			
	Potassium chloride Sodium bicarbonate		20mmol 50mmol	D/SALINE	1000	4 hours			
	Potassium chloride Sodium bicarbonate		20mmol 50mmol	D/SALINE	1000	4 hours			
	Potassium chloride Sodium bicarbonate		20mmol 50mmol	D/SALINE	1000	4 hours			
	Potassium chloride Sodium bicarbonate		20mmol 50mmol	D/SALINE	1000	4 hours			

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Chemo Nurse Sig.

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Page:	5 of 6	Valid until:	Next review

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HAEMATOLOGY CHEMOTHERAPY PRESCRIPTION

Consultant	Sridhar Chaganti
Clinical Nurse Specialist	Nicola Jones
Pharmacist	Nicola Marchant

**Lymphoma:
R-CODOX-M (Truxima®)
(≤65 years old)**

DAY NO. DATE	DRUG or ELECTROLYTE	CALCULATION	DOSE	I.V. FLUID	VOLUME (ml)	FLOW RATE	SPECIAL DIRECTIONS	DRUG ADMINISTRATION sig.	TIME
15 Intrathecal methotrexate due - please prescribe using H-ROTA 59									
16	FOLINIC ACID (Calcium Folinate)	15mg	PO				24 hours after intrathecal MTX		
17 Intrathecal methotrexate due - please prescribe using HROTA 59 Cycle 1 only and only if patient has proven or suspected CNS disease									
18	FOLINIC ACID (Calcium Folinate)	15mg	PO				24 hours after intrathecal MTX		

Proceed Rules

Drug	Neutrophils	Platelets	Renal (EDTA GFR ml/min)	Hepatic(bilirubin μmmol/L)
Cyclophosphamide	>1x10 ⁹ /L	>75x10 ⁹ /L	>20 =100% dose 10-20 = 75% dose <10 = 50% dose	Clinical decision
Intrathecal cytarabine	NA		NA	NA
Doxorubicin	>1x10 ⁹ /L		No dose reduction required	20-51 = 50% dose 51-85 = 25% dose >85 = omit ALT 80-120 = 75% dose >120 = 50% dose
Intrathecal Methotrexate	NA		NA	NA
Methotrexate	>1x10 ⁹ /L		>80 = 100% dose 60 = 65% dose 45 = 50% dose <30 – clinical decision	>50 and ALT <180 =100% dose 51-85 or ALT > 180 75% dose Bili >85 = clinical decision
Vincristine	>1x10 ⁹ /L		No dose reduction required	26-51 or ALT 60-180 = 50% dose >51 and ALT normal = 50% dose >51 and ALT >180 = omit
Rituximab	NA	NA	NA	NA

Prescriber Sig.

Date: Chemo Nurse

Date: Pharmacist

Date:

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Page:	6 of 6	Valid until:	Next review

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Medications to be prescribed on PICs

Anti-emetics	Supportive medication	Medications required at discharge (in addition to anti-emetics and supportive medication)
<ul style="list-style-type: none"> Ondansetron 8mg PO/IV BD on days 1-5 and day 10. Metoclopramide 10mg TDS PRN 	<ul style="list-style-type: none"> Allopurinol 300mg OD (100mg OD in renal impairment). <i>Consider rash/uric acid in tumour lysis syndrome.</i> Antifungal prophylaxis: as per QPULSE Antiviral prophylaxis: as per QPULSE Co-trimoxazole 480mg bd po MWF (to stop 7 days pre-MTX and restart 5 days post-MTX). Filgrastim 300mcg (<80kg) or 480mcg ($\geq 80\text{kg}$) SC/IV od from day 13 till neutrophils $> 1 \times 10^9/\text{l}$ for 2 consecutive days 	

Rituximab administration advice

First infusion:

Subsequent infusions:

Initial rate of 50mg/hr for the first 30 minutes. Can then be escalated in 50mg/hr increments every 30 minutes, to a maximum rate of 400mg/hr. If first infusion well tolerated, the following rapid schedule can be used: Give 100mls over 30 minutes. Then give remaining 400mls over 60 minutes.

In the event of a slower infusion rate being required, use the following schedule: Initial rate of 100mg/hr for the first 30 minutes. Can then be escalated in 100mg/hr increments every 30 minutes, to a maximum rate of 400mg/hr.

- Elderly patients or those with a high tumour burden may require a slower infusion rate.
- If a patient develops severe cytokine release syndrome the infusion should be interrupted immediately. On resolution, the infusion can be resumed at not more than one-half the previous rate. Mild to moderate infusion-related reactions usually respond to a reduction in infusion rate.
- During infusion, the patient's vital signs (bp, pulse, respiration and temperature) should be monitored every 30 minutes until infusion stops.

Schedule for folinic acid rescue

Folinic acid 15mg/m² 3-hourly IV - to start 36 hours after start of methotrexate infusion – see table for subsequent schedule.
Consider giving po after first 24 hours if patient is not vomiting.
****Important - prescribe dose 2 onwards on PICs****

Time after starting MTX	MTX plasma concentration ($\mu\text{mol/l}$)
<0.1	0.1-2
48hrs	None
72hrs	None
96hrs	None
120hrs	None

Time after starting MTX	MTX plasma concentration ($\mu\text{mol/l}$)
<0.1	0.1-2
48hrs	15mg/m ² q6h
72hrs	15mg/m ² q6h
96hrs	15mg/m ² q6h
120hrs	15mg/m ² q6h