Regimen Reference Order – CLL – FCR

ARIA: CLL – [FCR]

Planned Course: Every 28 days for 6 cycles
Indication for Use: Chronic Lymphocytic Leukemia

CVAD: At Provider's Discretion

Proceed with treatment if:

- ***Creatinine clearance greater than 30 mL/minute***

Cycle 1

- ***Proceed with treatment regardless of CBC***

Cycle 2 onwards

- ***ANC equal to or greater than 1 x 10^9/L AND Platelets equal to or greater than 50 x 10^9/L***
  - ❖ **Contact Hematologist if parameters not met**

***Note:* Hepatitis B serology results must be reviewed in accordance with CCMB Policy Hepatitis B Monitoring for Oncology and Hematology Patients**

SEQUENCE OF MEDICATION ADMINISTRATION

Pre-treatment Requirements

Drug	Dose	CCMB Administration Guideline
allopurinol	300 mg	Orally once daily for 10 days to begin 3 days prior to Cycle 1 and at provider's discretion for subsequent cycles **(Self-administered at home)** Only patients at risk of tumor lysis syndrome will be prescribed allopurinol

Treatment Regimen – CLL – FCR

Establish primary solution 500 mL of: normal saline

Drug	Dose	CCMB Administration Guideline
Cycle 1		
Day 1		
cetirizine	10 mg	Orally 30 minutes prior to riTUXimab
acetaminophen	650 mg	Orally 30 minutes prior to riTUXimab
dexamethasone	40 mg	IV in normal saline 50 mL over 15 minutes
Wait 30 minutes after completion of IV pre-medications before starting riTUXimab		

riTUXimab (IV brand name specific)	375 mg/m^2	**Slow infusion:** IV made up to a final concentration of 1 mg/mL in normal saline. Start at 50 mg/hr for 60 minutes and escalate infusion rate in 50 mg/hr increments every 30 minutes to maximum of 400 mg/hr **Nursing Alert: IV tubing is primed with riTUXimab* **Alert: Ensure brand name on prescription label (indicated in brackets on prescription label) matches prescribed order* **Alert: Pharmacy to ensure final volume on label*
ondansetron	16 mg	Orally 30 minutes pre-chemotherapy
fludarabine	25 mg/m^2	IV in normal saline 50 mL over 30 minutes
cyclophosphamide	250 mg/m^2	IV in normal saline 250 mL over 1 hour
Days 2 and 3		
dexamethasone	12 mg	Orally 30 minutes pre-chemotherapy
ondansetron	16 mg	Orally 30 minutes pre-chemotherapy
fludarabine	25 mg/m^2	IV in normal saline 50 mL over 30 minutes
cyclophosphamide	250 mg/m^2	IV in normal saline 250 mL over 1 hour
Cycles 2 onwards		
Day 1		
cetirizine	10 mg	Orally 30 minutes prior to riTUXimab
acetaminophen	650 mg	Orally 30 minutes prior to riTUXimab
dexamethasone	40 mg	IV in normal saline 50 mL over 15 minutes
Wait 30 minutes after completion of IV pre-medications before starting riTUXimab		
riTUXimab (Subcutaneous)	1600 mg (1600 mg = 13.4 mL)	**Subcutaneous:** Administer **over 7 minutes** into abdomen Syringe should be held in hand for 5 minutes to warm up and decrease viscosity Use 25G needle **Nursing Alert: Ensure subcutaneous riTUXimab formulation is used (riTUXimab-hyaluronidase, human)*
	OR	
riTUXimab (IV brand name specific)	500 mg/m^2	**Slow infusion:** IV made up to a final concentration of 1 mg/mL in normal saline. Start at 100 mg/hr for 30 minutes and escalate infusion rate in 100 mg/hr increments every 30 minutes to maximum of 400 mg/hr **Nursing Alert: IV tubing is primed with riTUXimab* **Alert: Ensure brand name on prescription label (indicated in brackets on prescription label) matches prescribed order* **Alert: Pharmacy to ensure final volume on label* **OR**

		Rapid infusion: IV in normal saline over 90 minutes: Infuse 50 mL of a 250 mL bag (or 100 mL of a 500 mL bag) over 30 minutes, then infuse the remaining 200 mL (or 400 mL of a 500 mL bag) over 60 minutes **Alert: Ensure brand name on prescription label (indicated in brackets on prescription label) matches prescribed order* **Alert: Pharmacy to ensure final volume on label*
ondansetron	16 mg	Orally 30 minutes pre-chemotherapy
fludarabine	25 mg/m^2	IV in normal saline 50 mL over 30 minutes
cyclophosphamide	250 mg/m^2	IV in normal saline 250 mL over 1 hour
Days 2 and 3		
dexamethasone	12 mg	Orally 30 minutes pre-chemotherapy
ondansetron	16 mg	Orally 30 minutes pre-chemotherapy
fludarabine	25 mg/m^2	IV in normal saline 50 mL over 30 minutes
cyclophosphamide	250 mg/m^2	IV in normal saline 250 mL over 1 hour
All doses will be automatically rounded that fall within CCMB Approved Dose Bands or Agent Rounding. See Dose Banding document for more information		

In the event of an infusion-related hypersensitivity reaction, refer to the '**Hypersensitivity Reaction Standing Order'**

REQUIRED MONITORING

Hepatitis B serology

- Hepatitis B surface antigen and Hepatitis B core antibody (drawn within preceding 5 years)

Day 1

- CBC, serum creatinine, urea, liver enzymes, electrolytes, LDH, total bilirubin, uric acid and albumin as per Physician Orders

INTRAVENOUS riTUXimab

- Full vital signs (temperature, heart rate, respiratory rate, blood pressure and O_2 saturation) at baseline and as clinically indicated
- No observation period is required after riTUXimab administration. Patient can be discharged from treatment room if stable whether they had a reaction or not

SUBCUTANEOUS riTUXimab

- Full vital signs (temperature, heart rate, respiratory rate, blood pressure and O_2 saturation) at baseline, at discharge, and as clinically indicated
- **15-minute observation period required after each dose**

Recommended Support Medications

Drug	Dose	CCMB Administration Guideline
sulfamethoxazole-trimethoprim	800/160mg	Orally twice daily on Saturdays and Sundays only
valACYclovir	500 mg	Orally once daily
metoclopramide	10 – 20 mg	Orally every 4 hours as needed for nausea and vomiting

DISCHARGE INSTRUCTIONS

- Patients should be instructed to contact their cancer team immediately if symptoms of hypersensitivity reactions occur after discharge
- Instruct patient to:
  - Continue taking anti-emetic(s) and support medications at home
  - Maintain oral intake of 2000 mL (8 glasses) of fluid daily at home
  - Empty bladder every 2 hours while awake and at bedtime for 24 hours
  - Obtain immediate assistance as per your clinic's contact instructions if:
    - Symptoms of hemorrhagic cystitis (e.g. dysuria, hematuria)
    - Unable to drink recommended amount of fluid
- valACYclovir is prescribed for herpes zoster (shingles) prophylaxis
- sulfamethoxazole-trimethoprim is prescribed for *Pneumocystis jirovecii* pneumonia prophylaxis
- Reinforce applicable safe handling precautions of medications, blood and body fluids for 48 hours after completion of chemotherapy

ADDITIONAL INFORMATION

- Patients on fludarabine should receive irradiated blood products
- Note that this regimen has a higher riTUXimab dose Cycle 2 onwards
- Due to the risk of reactivation of Hepatitis B virus (HBV) while on this treatment regimen, prescriber must adhere to CCMB Policy ***Hepatitis B Monitoring for Oncology and Hematology Patients*** for ordering and interpreting HBV serology and prescribing antiviral prophylaxis
- valACYclovir and sulfamethoxazole-trimethoprim DS continue while on treatment and for 12 months after discontinuation of FCR due to risk of prolonged immunosuppression
- Administering nurse must document any infusion-related reactions with any dose of riTUXimab
- Ensure there were **no Grade 3 or 4** infusion-related reaction with any previous dose prior to administering riTUXimab via Subcutaneous injection or Rapid Infusion
- Intravenous riTUXimab formulation is available from more than one manufacturer and uses several different brand names. Brand name will be indicated in brackets after riTUXimab. **Ensure prescription label matches the brand name on prescribed order for intravenous riTUXimab**