Regimen Reference Order – LEUK – CALGB 10403 (Interim Maintenance)

ARIA: LEUK - [CALGB 10403 (Int Maint)
ARIA Support: LEUK - [CALGB 10403(Int Maint) IT]

Planned Course: **Single cycle (1 Cycle = 49 days)**
Indication for Use: **Newly Diagnosed Precursor B-Cell Acute Lymphoblastic Leukemia**

CVAD: Preferred (VESICANT INVOLVED)

Proceed with treatment if:

Day 1

- ***ANC equal to or greater than 0.75 x 10^9/L AND Platelets equal to or greater than 75 x 10^9/L***

Days 11, 21, 31 and 41

- ***ANC equal to or greater than 0.5 x 10^9/L AND Platelets equal to or greater than 50 x 10^9/L***
  - ❖ **Contact Leukemia/BMT (L/BMT) Physician if parameters not met**

SEQUENCE OF MEDICATION ADMINISTRATION

Pre-treatment Requirements

Drug	Dose	CCMB Administration Guideline
Not Applicable		

Treatment Regimen – LEUK – CALGB 10403 (Interim Maintenance)

Establish primary solution 500 mL of: normal saline

Drug	Dose	CCMB Administration Guideline
Day 1		
ondansetron	16 mg	Orally 30 minutes pre-chemotherapy
vinCRIStine	1.5 mg/m^2; maximum dose 2 mg	IV in normal saline 25 mL over 2 to 3 minutes by gravity infusion
methotrexate	100 mg/m^2 (round to 2.5 mg)	IV in normal saline 250 mL over 1 hour **Nursing Alert: patient will be instructed to hold sulfamethoxazole-trimethoprim on days when methotrexate is administered*
Day 2		
acetaminophen	650 mg	Orally **1 hour** prior to pegaspargase
hydrocortisone	100 mg	IV in normal saline 50 mL over 15 minutes **1 hour** prior to pegaspargase **Nursing Alert: pegaspargase starts **1 hour after completion** of hydrocortisone*
famotidine	20 mg	IV in normal saline 50 mL over 15 minutes
diphenhydrAMINE	50 mg	IV in normal saline 50 mL over 15 minutes

Wait 30 minutes after completion of IV pre-medication(s) before starting pegaspargase		
pegaspargase	1000 units/m^2; maximum dose 1875 units	IV in normal saline 100 mL over 1 hour
Days 11 and 21		
ondansetron	16 mg	Orally 30 minutes pre-chemotherapy
vinCRIStine	1.5 mg/m^2; maximum dose 2 mg	IV in normal saline 25 mL over 2 to 3 minutes by gravity infusion
methotrexate	Dose is determined based on blood work results (see Capizzi methotrexate table on page 3)	IV in normal saline 250 mL over 1 hour **Nursing Alert: patient will be instructed to hold sulfamethoxazole-trimethoprim on days when methotrexate is administered*
Day 22		
acetaminophen	650 mg	Orally **1 hour** prior to pegaspargase
hydrocortisone	100 mg	IV in normal saline 50 mL over 15 minutes **1 hour** prior to pegaspargase **Nursing Alert: pegaspargase starts **1 hour after completion** of hydrocortisone*
famotidine	20 mg	IV in normal saline 50 mL over 15 minutes
diphenhydrAMINE	50 mg	IV in normal saline 50 mL over 15 minutes
Wait 30 minutes after completion of IV pre-medication(s) before starting pegaspargase		
pegaspargase	1000 units/m^2; maximum dose 1875 units	IV in normal saline 100 mL over 1 hour
Days 31 and 41		
ondansetron	16 mg	Orally 30 minutes pre-chemotherapy
vinCRIStine	1.5 mg/m^2; maximum dose 2 mg	IV in normal saline 25 mL over 2 to 3 minutes by gravity infusion
methotrexate	Dose is determined based on blood work results (see Capizzi methotrexate table on page 3)	IV in normal saline 250 mL over 1 hour **Nursing Alert: patient will be instructed to hold sulfamethoxazole-trimethoprim on days when methotrexate is administered*
Patients will receive methotrexate Intrathecal Therapy with this regimen **(See *Appendix A* – Intrathecal Therapy (IT))**		

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

Capizzi methotrexate Dose Escalations on Days 11, 21, 31 and 41

CBC Parameters	Action*
If ANC greater than 0.75 x 10^9/L and platelets greater than 75 x 10^9/L	Escalate methotrexate dose by 50 mg/m^2 from the previous dose (maximum dose 200 mg/m^2)
If ANC less than 0.5 x 10^9/L or platelets less than 50 x 10^9/L	Hold all chemotherapy on the day that methotrexate is due and repeat blood work in 4 days a) If ANC recovers to greater than or equal to 0.5 x 10^9/L and platelets greater than or equal to 50 x 10^9/L, give the same dose of methotrexate as previously given b) If ANC is still less than 0.5 x 10^9/L or platelets still less than 50 x 10^9/L, give vinCRIStine only and repeat blood work in 7 days to begin the next dose of methotrexate. Do not make up missed dose of methotrexate. Give pegaspargase on schedule
If ANC less than 0.75 x 10^9/L or platelets less than 75 x 10^9/L for more than 7 days after IV methotrexate administration	Discontinue sulfamethoxazole-trimethoprim temporarily If toxicity for more than 7 days recurs after the next dose, once hematologic toxicity resolves (ANC greater than 0.75 x 10^9/L and platelets greater than 75 x 10^9/L), then IV methotrexate should be given at 75% of the previous dose If neutropenia does not recur after 2 doses of IV methotrexate at the reduced dose, attempt to resume therapy at previous higher IV methotrexate dose
***methotrexate dose is calculated by the Leukemia/BMT clinic**	

REQUIRED MONITORING

Days 1, 11, 21 and 31

- CBC, serum creatinine, urea, electrolytes, liver enzymes, total bilirubin and glucose as per Physician Orders
- Glucose and lipase as per Physician Orders

Days 2 and 22

- Fibrinogen as per Physician Orders
- Full vital signs (temperature, heart rate, respiratory rate, blood pressure and O_2 saturation) at baseline and as clinically indicated during pegaspargase administration
- Observe patient for 1 hour after administration of pegaspargase. Full vital signs before discharge

Day 41

- CBC, serum creatinine, urea, electrolytes, liver enzymes, total bilirubin and glucose as per Physician Orders

Recommended Support Medications

Drug	Dose	CCMB Administration Guideline
valACYclovir	500 mg	Orally twice daily
sulfamethoxazole-trimethoprim	800/160 mg	Orally once daily on Mondays, Wednesdays, and Fridays
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) at home
- Remind patient to take valACYclovir (shingles prophylaxis) and sulfamethoxazole-trimethoprim (*Pneumocystis jirovecii* pneumonia prophylaxis) at home
- Instruct patient to hold sulfamethoxazole-trimethoprim on days when IT or IV methotrexate is administered
- Reinforce safe handling precautions of medications, blood and body fluids for 48 hours after completion of chemotherapy

ADDITIONAL INFORMATION

- Physician or designate must be on site in case of reactions to pegaspargase
  - Do not administer on weekends or holidays
- pegaspargase can cause anaphylaxis. diphenhydrAMINE, hydrocortisone and EPINEPHrine must be available in case of reaction
- pegaspargase can cause serious side effects such as hemorrhage, pancreatitis and thrombotic events
- sulfamethoxazole-trimethoprim should not be administered on days when intrathecal or intravenous methotrexate is administered due to potential drug interaction
- pegaspargase dose reduction is recommended for patients with fatty liver or BMI over 30 kg/m^2 (dose reduce to pegaspargase 500 units/m^2)
- vinCRIStine should be given 12 to 24 hours before pegaspargase to minimize toxicity
- Intrathecal therapy is part of this regimen to start on Day 1 of CALGB 10403 (Interim Maintenance). See *Appendix A* regarding dosing for the support regimen LEUK - [CALGB 10403(Int Maint) IT]. Support protocol is available under **CALGB (Int Maint IT)** in the "Leukemia" folder

Appendix A

Intrathecal Therapy (IT) – LEUK - [CALGB 10403(Int Maint) IT]

Proceed with treatment if:

- ***Platelets equal to or greater than 50 x 10^9/L***

Days 1 and 31

Drug	Dose	CCMB Administration Guideline
methotrexate	15 mg	Intrathecal in 6 mL preservative free normal saline administered in L/BMT Clinic

IT is ordered as a separate support regimen to start on Day 1 of CALGB 10403 (Interim Maintenance)