

Regimen Reference Order – LEUK - blinatumomab

ARIA: LEUK – [blinatumomab]

LEUK – [blinatumomab (maintenance)]

Planned Course: Induction (Cycles 1, 2 and 3) and Consolidation (Cycles 4 and 5): 28 days of treatment (continuous infusion) followed by 14 days with no therapy (1 cycle = 42 days)

Maintenance (4 cycles): 28 days of treatment (continuous infusion) followed by 56 days with no therapy (1 cycle = 84 days)

Indication for Use: Acute Lymphoblastic Leukemia Philadelphia Chromosome-Negative (Ph-ALL)

CVAD: Required

Proceed with treatment if:

- *AST/ALT is less than 5 times the upper limit of normal*
- *Total bilirubin is less than 3 times the upper limit of normal*
- *Creatinine Clearance greater than 30 mL/min*
- *Contact Physician if parameters not met*

Proceed regardless of platelet or ANC

SEQUENCE OF MEDICATION ADMINISTRATION

Pre-treatment Requirements

Drug	Dose	CCMB Administration Guideline
Not Applicable		

Treatment Regimen – LEUK - blinatumomab

Drug	Dose	CCMB Administration Guideline
Cycle 1 Induction		
Days 1 to 9		
Patients will be admitted to hospital for treatment. Follow inpatient orders		
Days 10, 12, 14, 16, 18, 20, 22, 24, 26		
blinatumomab	56 mcg (28 mcg/day)	IV in normal saline continuously over 48 hours by ambulatory infusion device to start at 1130H <i>CADD SOLIS VIP settings:</i> <i>Infusion rate = 5 mL/hour</i> <i>Reservoir Volume = 240 mL</i> <i>*Nursing Alert: Change bag exactly every 48 hours. Discard remainder of solution in IV bag and IV line</i>

Day 28		
blinatumomab	28 mcg	IV in normal saline continuously over 24 hours by ambulatory infusion device to start at 1130H <i>CADD SOLIS VIP settings:</i> <i>Infusion rate = 5 mL/hour</i> <i>Reservoir Volume = 240 mL</i> *Nursing Alert: Discard remainder of solution in IV bag and IV line on Day 29 at 11:30H
Cycle 2 Induction		
Days 1 to 2		
Patients will be admitted to hospital for treatment. Follow inpatient orders		
Days 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27		
blinatumomab	56 mcg (28 mcg/day)	IV in normal saline continuously over 48 hours by ambulatory infusion device to start at 1130H <i>CADD SOLIS VIP settings:</i> <i>Infusion rate = 5 mL/hour</i> <i>Reservoir Volume = 240 mL</i> *Nursing Alert: Change bag exactly every 48 hours. Discard remainder of solution in IV bag and IV line on Day 29 at 11:30H
Cycles 3 Induction		
Day 1		
dexamethasone	20 mg	IV in normal saline 50 mL over 15 minutes 1 hour prior to blinatumomab *Nursing Alert: blinatumomab starts 1 hour after completion of dexamethasone infusion
acetaminophen	650 mg	Orally 30 minutes prior to blinatumomab
diphenhydramINE	50 mg	IV in normal saline 50 mL over 15 minutes
blinatumomab	56 mcg (28 mcg/day)	IV in normal saline continuously over 48 hours by ambulatory infusion device to start at 1130H <i>CADD SOLIS VIP settings:</i> <i>Infusion rate = 5 mL/hour</i> <i>Reservoir Volume = 240 mL</i> *Nursing Alert: Change bag exactly every 48 hours. Discard remainder of solution in IV bag and IV line
Days 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27		
blinatumomab	56 mcg (28 mcg/day)	IV in normal saline continuously over 48 hours by ambulatory infusion device to start at 1130H <i>CADD SOLIS VIP settings:</i> <i>Infusion rate = 5 mL/hour</i> <i>Reservoir Volume = 240 mL</i> *Nursing Alert: Discard remainder of solution in IV bag and IV line on Day 29 at 11:30H

Cycles 4 to 5 Consolidation		
Day 1		
dexamethasone	20 mg	IV in normal saline 50 mL over 15 minutes 1 hour prior to blinatumomab <i>*Nursing Alert: blinatumomab starts 1 hour after completion of dexamethasone infusion</i>
acetaminophen	650 mg	Orally 30 minutes prior to blinatumomab
diphenhydrAMINE	50 mg	IV in normal saline 50 mL over 15 minutes
blinatumomab	56 mcg (28 mcg/day)	IV in normal saline continuously over 48 hours by ambulatory infusion device to start at 1130H <i>CADD SOLIS VIP settings: Infusion rate = 5 mL/hour Reservoir Volume = 240 mL</i> <i>*Nursing Alert: Change bag exactly every 48 hours. Discard remainder of solution in IV bag and IV line</i>
Days 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27		
blinatumomab	56 mcg (28 mcg/day)	IV in normal saline continuously over 48 hours by ambulatory infusion device to start at 1130H <i>CADD SOLIS VIP settings: Infusion rate = 5 mL/hour Reservoir Volume = 240 mL</i> <i>*Nursing Alert: Discard remainder of solution in IV bag and IV line on Day 29 at 11:30H</i>
Maintenance		
Day 1		
dexamethasone	20 mg	IV in normal saline 50 mL over 15 minutes 1 hour prior to blinatumomab <i>*Nursing Alert: blinatumomab starts 1 hour after completion of dexamethasone infusion</i>
acetaminophen	650 mg	Orally 30 minutes prior to blinatumomab
diphenhydrAMINE	50 mg	IV in normal saline 50 mL over 15 minutes
blinatumomab	56 mcg (28 mcg/day)	IV in normal saline continuously over 48 hours by ambulatory infusion device to start at 1130H <i>CADD SOLIS VIP settings: Infusion rate = 5 mL/hour Reservoir Volume = 240 mL</i> <i>Nursing Alert: Change bag exactly every 48 hours. Discard remainder of solution in IV bag and IV line</i>
Days 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27		
blinatumomab	56 mcg (28 mcg/day)	IV in normal saline continuously over 48 hours by ambulatory infusion device to start at 1130H <i>CADD SOLIS VIP settings: Infusion rate = 5 mL/hour Reservoir Volume = 240 mL</i> <i>*Nursing Alert: Discard remainder of solution in IV bag and IV line on Day 29 at 11:30H</i>
If re-initiation of therapy after interruptions of 4 hours or more, hospitalization or observation is recommended		

Do NOT flush line when drug running. May result in a bolus of blinatumomab. If accessing lumen, withdraw 2 mL of blood (containing drug) first, and then flush.

In the event of an infusion-related hypersensitivity reaction, contact Leukemia/BMT physician on call

REQUIRED MONITORING

Throughout therapy

- Monitor for signs and symptoms of cytokine release syndrome (CRS). Serious adverse events that may be associated with CRS include: pyrexia, headache, nausea, asthenia, hypotension, and elevations in serum aminotransferases and bilirubin
- Monitor for signs and symptoms of neurotoxicity. Symptoms may include: trembling, disturbance or loss of movement of parts of the body, speech or coordination disorders, apraxia, dizziness, confusion, disorientation, reversible seizures, encephalopathy, somnolence, agitation
- Full vital signs (temperature, heart rate, respiration, blood pressure and O₂ saturation) as clinically indicated

Cycle 1 with each 48 hour bag change

- CBC, differential, creatinine, urea, electrolytes, LDH, bilirubin, uric acid, phosphate, calcium, AST, ALT, ALP, GGT, albumin as per physician order

Cycle 2 and onwards

Weekly

- CBC, creatinine, urea, electrolytes, LDH, bilirubin, uric acid, phosphate, calcium, AST, ALT, ALP, GGT, albumin as per physician order

Twice weekly

- lipase

Recommended Support Medications

Drug	Dose	CCMB Administration Guideline
Not Applicable		

DISCHARGE INSTRUCTIONS

- Advise patient to contact Leukemia/BMT physician on call if encounter problems with pump after hours

ADDITIONAL INFORMATION

- N/A