ADULT Updated: April 25, 2023

# Regimen Reference Order – HEME – luspatercept (β-thalassemia)

ARIA: HEME - [luspatercept (beta-thal)]

Planned Course: Every 21 days

Indication for Use: Transfusion-dependent anemia associated with β-thalassemia

**CVAD: Not Required** 

#### Proceed with treatment if:

Hemoglobin less than 115 g/L

Contact Hematologist if parameters not met

### **SEQUENCE OF MEDICATION ADMINISTRATION**

Pre-treatment Requirements				
Drug	Dose	CCMB Administration Guideline		
Not Applicable				

## Treatment Regimen – HEME – luspatercept (β-thalassemia)

Drug	Dose	CCMB Administration Guideline
luspatercept	1 mg/kg*; maximum dose	Subcutaneous once every 3 weeks into the upper arm, thigh, and/or abdomen
	120 mg	*Nursing Alert: Maximum volume at each injection site is 1.2 mL. If more than 1 syringe is required, injections should be given using the same anatomical location but on opposite sides of the body (e.g. left thigh and right thigh)

<sup>\*</sup>Dose may be increased to 1.25 mg/kg at the hematologist's discretion if patient does not achieve a reduction in RBC transfusion burden of at least a third from baseline after at least two consecutive doses (6 weeks) at 1 mg/kg starting dose

All doses will be automatically rounded that fall within CCMB Approved Dose Bands. 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**

#### All Cycles

- CBC, serum creatinine, urea, liver enzymes and total bilirubin as per Physician Orders
- Blood pressure at each clinic visit
- Full vital signs (temperature, heart rate, respiratory rate, blood pressure and O<sub>2</sub> saturation) prior to each dose and as clinically indicated
- No observation period required. Patient can be discharged from treatment room if stable whether they had a reaction or not



<sup>\*</sup>If hemoglobin increases by greater than 20 g/L within 3 weeks, in the absence of a transfusion, dose reduction may be required at the hematologist's discretion

Recommended Support Medications				
Dru	g	Dose	CCMB Administration Guideline	
None required				

### **DISCHARGE INSTRUCTIONS**

- Patients should be instructed to contact their cancer team immediately if symptoms of hypersensitivity reactions occur after discharge
- Instruct patient to report to clinic if they are experiencing pain or injection site reactions that are bothersome

#### ADDITIONAL INFORMATION

- Patients with β-thalassemia may be at an increased risk of thromboembolic events while receiving treatment with luspatercept. Patients with a higher baseline risk of thromboembolic events (e.g. asplenic patients) may require thromboprophylaxis
- · luspatercept may increase blood pressure
- · luspatercept is teratogenic

