

Regimen Reference Order

MYEL – daratumumab + lenalidomide + dexamethasone (DRd)

ARIA: MYEL – [DRd]

Planned Course: Until disease progression or unacceptable toxicity (1 cycle = 28 days)
Indication for Use: Multiple Myeloma: First Line (Transplant Ineligible) OR Relapsed/Refractory
CVAD: At Provider’s Discretion

Proceed with treatment if:

lenalidomide:
Day 1 of every cycle & Day 15 of Cycles 1 and 2

- ANC equal to or greater than $1 \times 10^9/L$ AND Platelets equal to or greater than $30 \times 10^9/L$

daratumumab:

- On Day 1, proceed with daratumumab only when lenalidomide starts
- On subsequent treatment days, proceed with daratumumab regardless of CBC

❖ Contact Hematologist if parameters not met

SEQUENCE OF MEDICATION ADMINISTRATION

Pre-treatment Requirements		
Drug	Dose	CCMB Administration Guideline
montelukast	10 mg	Orally once daily in the morning starting the day before daratumumab to 4, Days 7 to 11, Days 14 to 18 and Days 21 to 25 of Cycle 1 Cycle 2 and onwards at the discretion of the physician (Self-administered at home) <i>*Nursing Alert: Notify physician if patient has not taken montelukast. montelukast is prescribed to prevent infusion reactions</i>

Treatment Regimen – MYEL – daratumumab + lenalidomide + dexamethasone (DRd)		
Establish primary solution 500 mL of: normal saline		
Drug	Dose	CCMB Administration Guideline
Cycle 1		
cetirizine	10 mg	Orally 1 hour prior to daratumumab on Days 1, 2, 8, 15 and 22
acetaminophen	975 mg	Orally 1 hour prior to daratumumab on Days 1, 2, 8, 15 and 22
dexamethasone	20 mg	IV in normal saline 50 mL over 15 minutes 1 hour prior to daratumumab on Days 1, 2, 8, 15 and 22 <i>*Nursing Alert: daratumumab starts 1 hour after completion of dexamethasone</i>

Wait 1 hour after completion of IV pre-medication(s) before starting daratumumab		
daratumumab	8 mg/kg	<p>Slow infusion: IV in normal saline 500 mL on Days 1 and 2 following administration rates below:</p> <ul style="list-style-type: none"> • 0 to 60 minutes – 50 mL/hour • 60 to 120 minutes – 100 mL/hour • 120 to 180 minutes – 150 mL/hour • 180 minutes onwards – 200 mL/hour <p>Use 0.2 or 0.22 micron filter</p> <p><i>*Alert: Pharmacy to ensure final volume in bag = 500 mL</i></p> <p><i>*Nursing Alert: IV tubing is primed with daratumumab</i></p>
	16 mg/kg	<p>Slow infusion: IV in normal saline 500 mL on Day 8 following administration rates below:</p> <ul style="list-style-type: none"> • 0 to 60 minutes – 50 mL/hour • 60 to 120 minutes – 100 mL/hour • 120 to 180 minutes – 150 mL/hour • 180 minutes onwards – 200 mL/hour <p>Use 0.2 or 0.22 micron filter</p> <p><i>*Alert: Pharmacy to ensure final volume in bag = 500 mL</i></p> <p><i>*Nursing Alert: IV tubing is primed with daratumumab</i></p>
	16 mg/kg	<p>Slow infusion: IV in normal saline 500 mL on Days 15 and 22 following administration rates below:</p> <ul style="list-style-type: none"> • 0 to 60 minutes – 100 mL/hour • 60 to 120 minutes – 150 mL/hour • 120 minutes onwards – 200 mL/hour <p>Use 0.2 or 0.22 micron filter</p> <p><i>*Alert: Pharmacy to ensure final volume in bag = 500 mL</i></p> <p><i>*Nursing Alert: IV tubing is primed with daratumumab</i></p>
lenalidomide	25 mg	<p>Orally once daily with or without food on Days 1 to 21, then 7 days off</p> <p>Swallow whole</p> <p>(Self-administered at home)</p>
dexamethasone	20 mg	<p>Orally once daily in the morning with food on Days 9, 16 and 23</p> <p>(Self-administered at home)</p>
Cycle 2		
cetirizine	10 mg	Orally 1 hour prior to daratumumab on Days 1, 8, 15 and 22
acetaminophen	975 mg	Orally 1 hour prior to daratumumab on Days 1, 8, 15 and 22
dexamethasone	20 mg	<p>IV in normal saline 50 mL over 15 minutes 1 hour prior to daratumumab on Days 1, 8, 15 and 22</p> <p><i>*Nursing Alert: daratumumab starts 1 hour after completion of dexamethasone</i></p>
Wait 1 hour after completion of IV pre-medication(s) before starting daratumumab		

daratumumab	16 mg/kg	Rapid infusion: IV in normal saline 500 mL over 90 minutes on Days 1, 8, 15, and 22: infuse 100 mL over 30 minutes, then infuse the remaining 400 mL over 60 minutes <i>Use 0.2 or 0.22 micron filter</i> <i>*Alert: Pharmacy to ensure final volume in bag = 500 mL</i> <i>*Nursing Alert: IV tubing is primed with daratumumab</i>
lenalidomide	25 mg	Orally once daily with or without food on Days 1 to 21, then 7 days off Swallow whole (Self-administered at home)
dexamethasone	20 mg	Orally once daily in the morning with food on Days 2, 9, 16 and 23 (Self-administered at home)
Cycles 3 to 6		
cetirizine	10 mg	Orally 1 hour prior to daratumumab on Days 1 and 15
acetaminophen	975 mg	Orally 1 hour prior to daratumumab on Days 1 and 15
dexamethasone	20 mg	IV in normal saline 50 mL over 15 minutes 1 hour prior to daratumumab on Days 1 and 15 <i>*Nursing Alert: daratumumab starts 1 hour after completion of dexamethasone</i>
Wait 1 hour after completion of IV pre-medication(s) before starting daratumumab		
daratumumab	16 mg/kg	Rapid infusion: IV in normal saline 500 mL over 90 minutes on Days 1 and 15: infuse 100 mL over 30 minutes, then infuse the remaining 400 mL over 60 minutes <i>Use 0.2 or 0.22 micron filter</i> <i>*Alert: Pharmacy to ensure final volume in bag = 500 mL</i> <i>*Nursing Alert: IV tubing is primed with daratumumab</i>
dexamethasone	20 mg	Orally once daily in the morning with food on Days 2 and 16 (Self-administered at home)
lenalidomide	25 mg	Orally once daily with or without food on Days 1 to 21, then 7 days off Swallow whole (Self-administered at home)
dexamethasone	40 mg	Orally once daily in the morning with food on Days 8 and 22 (Self-administered at home)
Cycle 7 and Onwards		
cetirizine	10 mg	Orally 1 hour prior to daratumumab on Day 1
acetaminophen	975 mg	Orally 1 hour prior to daratumumab on Day 1
dexamethasone	20 mg	IV in normal saline 50 mL over 15 minutes 1 hour prior to daratumumab on Day 1 <i>*Nursing Alert: daratumumab starts 1 hour after completion of dexamethasone</i>

Wait 1 hour after completion of IV pre-medication(s) before starting daratumumab		
daratumumab	16 mg/kg	Rapid infusion: IV in normal saline 500 mL over 90 minutes on Day 1: infuse 100 mL over 30 minutes, then infuse the remaining 400 mL over 60 minutes <i>Use 0.2 or 0.22 micron filter</i> <i>*Alert: Pharmacy to ensure final volume in bag = 500 mL</i> <i>*Nursing Alert: IV tubing is primed with daratumumab</i>
lenalidomide	25 mg	Orally once daily with or without food on Days 1 to 21, then 7 days off Swallow whole (Self-administered at home)
dexamethasone	20 mg	Orally once daily in the morning with food on Day 2 (Self-administered at home)
dexamethasone	40 mg	Orally once daily in the morning with food on Days 8, 15 and 22 (Self-administered at home)
All doses will be automatically rounded that fall within the DSG Approved Dose Bands. See LYMP DSG – Dose Banding document for more information		
lenalidomide (Revlimid®) available dosage strengths: 2.5 mg, 5 mg, 10 mg, 15 mg, 20 mg and 25 mg capsules Classification: Cytotoxic, Hazardous		

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

REQUIRED MONITORING

Baseline

- RBC serology (genotyping) mandatory prior to starting daratumumab
- Hepatitis B serology

Cycles 1 and 2

Day 1

- CBC, serum creatinine, urea, electrolytes, liver enzymes, total bilirubin, albumin and glucose as per Physician Orders
- Serum Protein Electrophoresis (SPEP)/Free Light Chain Ratio (FLCH) (response assessment)

Day 15

- CBC

Days 8 and 22

- No blood work required

Cycles 3 to 6

Day 1

- CBC, serum creatinine, urea, electrolytes, liver enzymes, total bilirubin, albumin and glucose as per Physician Orders
- SPEP/FLCH (response assessment)

Day 15

- No blood work required

Cycle 7 and Onwards

Day 1

- CBC, serum creatinine, urea, electrolytes, liver enzymes, total bilirubin, albumin and glucose as per Physician Orders
- SPEP/FLCH (response assessment)

Throughout therapy

TSH every 3 months as per Physician Orders

daratumumab monitoring

All Doses

- Full vital signs (temperature, heart rate, respiratory rate, blood pressure and O₂ saturation) at baseline and as clinically indicated
- No observation period is required after daratumumab administration. Patient can be discharged from treatment room if stable whether they had a reaction or not

Per RevAid Program or Reddy2Assist Program – See Additional Information

- Patients of childbearing potential require β HCG according to RevAid Program/Reddy2Assist Program requirements

Recommended Support Medications

Drug	Dose	CCMB Administration Guideline
valACYclovir	500 mg	Orally once daily
acetylsalicylic acid (ASA) enteric coated	81 mg delayed release	Orally once daily
dexamethasone	4 mg	Orally once in the morning the day after daratumumab on Day 3 of Cycle 1 only <i>Note: dexamethasone is prescribed to prevent delayed infusion reactions (respiratory)</i>
fluticasone and salmeterol combination	100 mcg – 50 mcg per dose	Prescribed at physician's discretion If patient has a history of asthma or COPD, 1 inhalation twice daily only as needed post daratumumab infusion

DISCHARGE INSTRUCTIONS

- Patients should be instructed to contact their cancer team immediately if symptoms of hypersensitivity reactions occur after discharge
- lenalidomide and dexamethasone are cancer therapies in this treatment regimen. Remind patient to take lenalidomide and dexamethasone at home
- Remind patient to take support medications including valACYclovir (shingles prophylaxis) and ASA (antiplatelet) at home
- Reinforce applicable safe handling precautions of medications, blood and body fluids for 48 hours after completion of lenalidomide

ADDITIONAL INFORMATION

- daratumumab interferes with cross-matching and red blood cell antibody screening. **Indicate on all Canadian Blood Services requisitions that the patient is on daratumumab**
- daratumumab may interfere with the interpretation of the Serum Protein Electrophoresis (SPEP) results. **Indicate on all immunology (SPEP) requisitions that the patient is on daratumumab**
- Administering nurse must document any infusion-related reactions with any dose of daratumumab
- Consideration may be given to reducing dexamethasone dose at the physician's discretion to 20 mg for patients older than 75 years or for patients with a body mass index of less than 18.5
- valACYclovir (shingles prophylaxis) continues while on treatment and for 1 month after discontinuation of treatment due to risk of prolonged immunosuppression

- Patients should take therapy to prevent blood clots while on lenalidomide. The majority of patients will be prescribed acetylsalicylic acid (ASA) enteric coated 81 mg once daily. Patients at high risk may be prescribed other anticoagulants instead of acetylsalicylic acid
- All patients should be considered for bisphosphonate therapy
- lenalidomide is teratogenic
- Patients of childbearing potential will require monthly pregnancy tests (β HCG) that must be done within 7 days of the next prescription fill
- Effective November 25th, 2021, all **new patients** starting on lenalidomide will be enrolled in Reddy2Assist Program and lenalidomide will be dispensed by CCMB Pharmacy. lenalidomide can only be given to patients who are registered and meet all conditions of Reddy2Assist Program
- Existing patients on lenalidomide (started prior to November 25th, 2021) are currently enrolled in RevAid Program and will continue to have their lenalidomide prescriptions dispensed by the RevAid Registered Pharmacy
- Administration site restrictions are in place for daratumumab. Cycle 1, Days 1 and 2 must be administered at CCMB MacCharles in Winnipeg