

Regimen Reference Order – MYEL – carfilzomib + lenalidomide + dexamethasone

ARIA: MYEL – [carfilzomib + lenalidomide + dex]

Planned Course: carfilzomib, lenalidomide and dexamethasone for 18 cycles, followed by lenalidomide and dexamethasone until disease progression or unacceptable toxicity (1 cycle = 28 days)

Indication for Use: Multiple Myeloma

CVAD: At Provider's Discretion

Proceed with treatment if:

Days 1 and 15 (Cycles 1 to 18); Day 1 only (Cycle 19 and onwards)

ANC equal to or greater than $0.5 \times 10^9/L$ AND Platelets equal to or greater than $30 \times 10^9/L$

❖ **Contact Hematologist if parameters not met**

SEQUENCE OF MEDICATION ADMINISTRATION

Pre-treatment Requirements

Drug	Dose	CCMB Administration Guideline
Instruct patient to start vigorous oral pre-hydration of 6 to 8 cups of liquid per day starting at least 48 hours before Cycle 1 only		
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 * Only patients at risk of tumor lysis syndrome will be prescribed allopurinol
ciprofloxacin	500 mg	Orally once daily starting the day prior to Cycle 1 only

Treatment Regimen – MYEL – carfilzomib + lenalidomide + dexamethasone

Establish primary solution 500 mL of: normal saline

Drug	Dose	CCMB Administration Guideline
Cycle 1		
dexamethasone	40 mg	Orally once daily on Days 1, 8, 15 and 22 (self-administered at home) On days of carfilzomib administration, dexamethasone should be taken between <u>30 minutes to 4 hours</u> prior to carfilzomib
normal saline	500 mL	IV over 1 hour prior to carfilzomib (Pre hydration)
carfilzomib	20 mg/m ²	IV in D5W 50 mL over 10 minutes on Days 1 and 2
	27 mg/m ²	IV in D5W 50 mL over 10 minutes on Days 8, 9, 15 and 16
normal saline	500 mL	Infused over the 1 hour observation period (Post hydration)
lenalidomide	25 mg	Orally once daily on Days 1 to 21, then 7 days off . Can be taken any time of day (self-administered at home)

Cycles 2 to 12		
dexamethasone	40 mg	Orally once daily on Days 1, 8, 15 and 22 (self-administered at home) On days of carfilzomib administration, dexamethasone should be taken between <u>30 minutes to 4 hours</u> prior to carfilzomib
carfilzomib	27 mg/m ²	IV in D5W 50 mL over 10 minutes on Days 1, 2, 8, 9, 15 and 16
lenalidomide	25 mg	Orally once daily on Days 1 to 21, then 7 days off . Can be taken any time of day (self-administered at home)
Cycles 13 to 18		
dexamethasone	40 mg	Orally once daily on Days 1, 8, 15 and 22 (self-administered at home) On days of carfilzomib administration, dexamethasone should be taken between <u>30 minutes to 4 hours</u> prior to carfilzomib
carfilzomib	27 mg/m ²	IV in D5W 50 mL over 10 minutes on Days 1, 2, 15 and 16
lenalidomide	25 mg	Orally once daily on Days 1 to 21, then 7 days off . Can be taken any time of day (self-administered at home)
Cycle 19 onwards		
dexamethasone	40 mg	Orally once daily on Days 1, 8, 15 and 22 (self-administered at home)
lenalidomide	25 mg	Orally once daily Days 1 to 21, then 7 days off . Can be taken any time of day (self-administered at home)
*lenalidomide (Revlimid®) available dosage strengths: 5 mg, 10 mg, 15 mg, 20 mg and 25 mg capsules		
*Classification: Cytotoxic, Hazardous		
Maximum carfilzomib dose is: 44 mg (Cycle 1, Days 1 & 2); 60 mg (Cycle 1, Day 8 and onwards) All doses will be automatically rounded that fall within the DSG Approved Dose Bands. See LYMP DSG – Dose Banding document for more information		

Flush after each medication:

- 50 mL over 6 minutes (500 mL/ hr))

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

REQUIRED MONITORING

Cycle 1 only

- Observe patient 1 hour post carfilzomib administration for Cycle 1 only (during Post Hydration)
- Patient should be assessed for signs and symptoms of fluid overload prior to each carfilzomib dose

Cycles 1 to 18

Day 1

- CBC, reticulocyte count, biochemistry as per physician order
- Serum Protein Electrophoresis (SPEP)/Free Light Chain Ratio

Day 15

- CBC, reticulocyte count, biochemistry as per physician order

Cycle 19 and onwards

- CBC, reticulocyte count, biochemistry as per physician order
- SPEP/Free Light Chain Ratio

Recommended Support Medications

Drug	Dose	CCMB Administration Guideline
acetylsalicylic acid (ASA) enteric coated	81 mg delayed release	Orally once daily
valACYclovir	500 mg	Orally once daily

DISCHARGE INSTRUCTIONS

- Reinforce oral hydration of 6 to 8 cups of liquid per day
- Remind patient to take lenalidomide and dexamethasone at home
- Patients should be instructed to inform their cancer team of shortness of breath or signs and symptoms of fluid overload
- Reinforce applicable safe handling precautions of medications, blood and body fluids for 48 hours after completion of chemotherapy

ADDITIONAL INFORMATION

- carfilzomib has been associated with cardiotoxicity
- Patients must be enrolled in the RevAid program prior to starting this regimen