

Regimen Reference Order – MYEL – carfilzomib + dexamethasone

ARIA: MYEL – [carfilzomib + dexamethasone]

Planned Course: Until disease progression or unacceptable toxicity (1 cycle = 28 days)

Indication for Use: Multiple Myeloma

CVAD: At Provider's Discretion

Proceed with treatment if:

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

- ***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***

Note: Hepatitis B serology results must be reviewed in accordance with CCMB Policy Hepatitis B Monitoring for Oncology and Hematology Patients

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

Treatment Regimen – MYEL – carfilzomib + 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) *Alert: 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 on Days 1, 8 and 15 (Pre-hydration)
carfilzomib	20 mg/m ²	IV in D5W 100 mL over 30 minutes on Day 1
	70 mg/m ²	IV in D5W 100 mL over 30 minutes on Days 8 and 15
normal saline	500 mL	Infused over the 1-hour observation period on Days 1, 8 and 15 (Post-hydration)

Cycle 2 and Onwards		
dexamethasone	40 mg	Orally once daily in the morning with food on Days 1, 8, 15 and 22 (Self-administered at home) <i>*Alert:</i> On days of carfilzomib administration, dexamethasone should be taken between <u>30 minutes to 4 hours</u> prior to carfilzomib
carfilzomib	70 mg/m ²	IV in D5W 100 mL over 30 minutes on Days 1, 8 and 15
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

Hepatitis B serology

- Hepatitis B surface antigen and Hepatitis B core antibody (drawn within preceding 5 years)

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)
- Physician should assess patient for signs and symptoms of cardiotoxicity prior to each cycle

Day 15

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

Cycle 3 and Onwards

Day 1

- CBC, serum creatinine, urea, electrolytes, liver enzymes, total bilirubin, albumin and glucose as per Physician Orders
- SPEP/FLCH
- Physician should assess patient for signs and symptoms of cardiotoxicity prior to each cycle

carfilzomib monitoring

- Patient should be assessed for signs and symptoms of fluid overload prior to each carfilzomib dose
- Full vital signs (temperature, heart rate, respiratory rate, blood pressure and O₂ saturation) at baseline and as clinically indicated
- Observe patient for 1 hour after carfilzomib infusion for Cycle 1 only (during Post hydration). Full vital signs prior to discharge

Recommended Support Medications

Drug	Dose	CCMB Administration Guideline
valACYclovir	500 mg	Orally once daily

DISCHARGE INSTRUCTIONS

- Reinforce oral hydration of 6 to 8 cups of liquid per day
 - Remind patient to take 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
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ADDITIONAL INFORMATION

- carfilzomib has been associated with cardiotoxicity
- Due to the risk of reactivation of Hepatitis B virus (HBV) while on this treatment regimen, prescriber must adhere to CCMB Policy ***Hepatitis B Monitoring for Oncology and Hematology Patients*** for ordering and interpreting HBV serology and prescribing antiviral prophylaxis