Regimen Monograph

Regimen Name | Drug Regimen | Cycle Frequency | Premedication and Supportive Measures | Administrative Information | References | Other Notes | Disclaimer

A - Regimen Name

CARFCYCLDEXA Regimen

Carfilzomib-Cyclophosphamide-Dexamethasone

Disease Site

Hematologic
Multiple Myeloma

Intent

Palliative

Regimen Category

Evidence-informed :

Regimen is considered appropriate as part of the standard care of patients; meaningfully improves outcomes (survival, quality of life), tolerability or costs compared to alternatives (recommended by the Disease Site Team and national consensus body e.g. pan-Canadian Oncology Drug Review, pCODR). Recommendation is based on an appropriately conducted phase III clinical trial relevant to the Canadian context OR (where phase III trials are not feasible) an appropriately sized phase II trial. Regimens where one or more drugs are not approved by Health Canada for any indication will be identified under Rationale and Use.

This **Regimen Abstract** is an **abbreviated** version of a Regimen Monograph and contains only top level information on usage, dosing, schedule, cycle length and special notes (if available). Information in regimen abstracts is accurate to the extent of the ST-QBP regimen master listings, and has not undergone the full review process of a regimen monograph. Full regimen monographs will be published for each ST-QBP regimen as they are developed.

Rationale and Uses

Treatment of relapsed/refractory multiple myeloma

Supplementary Public Funding

dexamethasone
ODB - General Benefit (dexamethasone) (ODB Formulary)

cyclophosphamide
ODB - General Benefit (cyclophosphamide - oral tablets) (ODB Formulary)

back to top

B - Drug Regimen

Cycle 1:

carfilzomib†	20 mg /m²	IV	Day 1
(This drug is not currently publicly funded for this regimen and intent)			
carfilzomib†	70 mg /m²	IV	Days 8, 15
(This drug is not currently publicly funded for this regimen and intent)			
cyclophosphamide	300 mg /m²	PO	Days 1, 8, 15, 22
dexamethasone^	40 mg /day	IV / PO	Days 1, 8, 15, 22

Cycle 2 and beyond:

carfilzomib†	70 mg /m²	IV	Days 1, 8, 15
(This drug is not currently publicly funded for this regimen and intent)			
cyclophosphamide	300 mg /m²	PO	Days 1, 8, 15, 22
dexamethasone^	40 mg /day	IV / PO	Days 1, 8, 15, 22

†Patients with BSA > 2.2 m^2 should be dosed based on a maximum BSA of 2.2 m^2.

^The dexamethasone dose should be reduced in elderly patients.

back to top

C - Cycle Frequency

REPEAT EVERY 28 DAYS

Until disease progression or unacceptable toxicity (up to a maximum of 12 cycles for cyclophosphamide)

back to top

D - Premedication and Supportive Measures

Antiemetic Regimen: Low

Also refer to CCO Antiemetic Summary

Screen for hepatitis B virus in all cancer patients starting systemic treatment. Refer to the hepatitis B virus screening and management guideline.

Other Supportive Care:

Carfilzomib:

- Consider the use of antiviral prophylaxis during carfilzomib therapy to decrease the risk of herpes zoster and HBV reactivation.
- Consider thromboprophylaxis in patients being treated with carfilzomib. The choice of agent should be based on patient risk factors and clinical status.
- Patients at risk of tumour lysis syndrome (i.e. high tumour burden) should have appropriate prophylaxis and be monitored closely.
- Hypertension should be well-controlled prior to initiation of treatment with carfilzomib.
- Adequate hydration is required prior to dosing in cycle 1, especially in patients at high risk for tumour lysis syndrome or renal toxicity.
  The total fluid volume may be adjusted as clinically indicated in patients with baseline or at high risk of cardiac failure.
  - Cycle 1:
    - Oral fluids (30 mL/kg/day for 48 hours before start of cycle), and
    - IV fluids: 250-500 mL before each dose, and if needed after each dose

- Subsequent cycles:
  - Continue oral and/or IV hydration as needed

- On carfilzomib treatment days, dexamethasone IV/PO should be given at least 30 minutes, but no more than 4 hours before carfilzomib.

back to top

J - Administrative Information

Cyclophosphamide PO and dexamethasone PO: Outpatient prescription for home administration

back to top

K - References

Venner CP, LeBlanc R, Sandhu I, et al. Weekly carfilzomib plus cyclophosphamide and dexamethasone in the treatment of relapsed/refractory multiple myeloma: Final results from the MCRN-003/MYX.1 single arm phase II trial. Am J Hematol 2021 May 1;96(5):552-60.

PEBC Advice Documents or Guidelines

- Treatment of Multiple Myeloma: ASCO and CCO Joint Clinical Practice Guideline

October 2023 Modified Drug regimen and Other supportive care sections

back to top

M - Disclaimer

Regimen Abstracts

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Regimen Monographs

Refer to the New Drug Funding Program or Ontario Public Drug Programs websites for the most up-to-date public funding information.

The information set out in the drug monographs, regimen monographs, appendices and symptom management information (for health professionals) contained in the Drug Formulary (the "Formulary") is intended for healthcare providers and is to be used for informational purposes only. The information is not intended to cover all possible uses, directions, precautions, drug interactions or adverse effects of a particular drug, nor should it be construed to indicate that use of a particular drug is safe, appropriate or effective for a given condition. The information in the Formulary is not intended to constitute or be a substitute for medical advice and should not be relied upon in any such regard. All uses of the Formulary are subject to clinical judgment and actual prescribing patterns may not follow the information provided in the Formulary.

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Some Formulary documents, such as the medication information sheets, regimen information sheets and symptom management information (for patients), are intended for patients. Patients should always consult with their healthcare provider if they have questions regarding any information set out in the Formulary documents.

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back to top