Regimen Monograph

A - Regimen Name

BMP+DARA(SC) Regimen

Bortezomib-Melphalan-Prednisone-Daratumumab (subcut)

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
For treatment of newly diagnosed multiple myeloma, in patients who are not suitable for autologous stem cell transplant and have good performance status

Supplementary Public Funding
bortezomib
New Drug Funding Program (Bortezomib - Previously Untreated - Multiple

Myeloma) (NDFP Website)

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

prednisone
ODB - General Benefit (prednisone) (ODB Formulary)

daratumumab (subcut)
New Drug Funding Program (Daratumumab in Combination with a Bortezomib-Based Regimen for Newly Diagnosed Transplant Ineligible Multiple Myeloma) (NDFP Website)

back to top

B - Drug Regimen

Note: Different daratumumab products are NOT INTERCHANGEABLE.

Cycle 1^:

daratumumab (subcut)	1800 mg	Subcut	Days 1, 8, 15, 22, 29, 36
bortezomib†	1.3 mg /m²	IV / Subcut	Days 1, 4, 8, 11, 22, 25, 29, 32
melphalan	9 mg /m²	PO	Days 1 to 4
prednisone	60 mg /m²	PO	Days 1 to 4

Cycles 2 to 9^:

daratumumab (subcut)	1800 mg	Subcut	Days 1, 22
bortezomib†	1.3 mg /m²	IV / Subcut	Days 1, 8, 22, 29
melphalan	9 mg /m²	PO	Days 1 to 4
prednisone	60 mg /m²	PO	Days 1 to 4

^Dosing based on ALCYONE trial. Other BMP schedules may be considered.

†Missed doses should not be made up. A minimum of 72 hours is required between bortezomib

doses

back to top

C - Cycle Frequency

REPEAT EVERY 42 DAYS

For 9 cycles, unless disease progression or unacceptable toxicity

Refer to DARA(MNT-SC) for CYCLES 10 AND BEYOND (Daratumumab monotherapy REPEAT EVERY 28 DAYS until disease progression or unacceptable toxicity)

back to top

D - Premedication and Supportive Measures

Antiemetic Regimen: Low
Minimal (Cycle 1, Days 15 and 36)
No routine prophylaxis for melphalan PO

Other Supportive Care:

Also refer to CCO Antiemetic Recommendations.

Supportive care:

- HBV screening should be performed in all patients prior to starting daratumumab.
- Consider antiviral prophylaxis for herpes zoster reactivation.
- Daratumumab can interfere with cross-matching for blood transfusions; type and screen and RBC genotyping tests should be done before starting this drug.
- Patients at risk of tumour lysis syndrome should have appropriate prophylaxis and be monitored closely.

Daratumumab (subcut) Pre-medications (prophylaxis for administration-related reactions (ARRs)) :

To be given at least 1 hour prior to each dose:

- Dexamethasone 20 mg IV/PO*
- Oral antipyretic (e.g., acetaminophen 650-1000 mg)
- H1-receptor antagonist IV/PO (e.g., diphenhydramine 25-50 mg or equivalent)
- Montelukast 10 mg PO‡

*Additional regimen specific steroids (e.g. prednisone) should not be taken on injection days when dexamethasone is given as pre-medication.

‡Montelukast 10 mg was optional on Cycle 1 Day 1 during clinical trials of daratumumab (subcut). The addition of montelukast given prior to the first daratumumab IV infusion numerically reduced the incidence of respiratory infusion reactions in the study by Nooka et al.

Daratumumab (subcut) Post-medications (prevention of delayed ARRs):

- Prednisone as per BMP regimen**
- Consider bronchodilators (e.g., short and long acting) and inhaled corticosteroids (for patients with a history of COPD) ‖ #

**Or alternative corticosteroids (e.g. oral methylprednisolone (≤20 mg) or equivalent) the day after injection as per physician discretion. May be discontinued after the 3rd injection if no major systemic ARRs occurred (excluding regimen-specific corticosteroids).

‖Consider adding an H1-receptor antagonist if the patient is at higher risk of respiratory complications.

#May be discontinued after the 4th injection if no major ARRs occurred.

back to top

J - Administrative Information

Approximate Patient Visit	1.5 hours
Pharmacy Workload (average time per visit)	22.444 minutes
Nursing Workload (average time per visit)	41.792 minutes

back to top

K - References

Bortezomib and daratumumab (subcut) drug monographs. Ontario Health (Cancer Care Ontario).

Mateos MV, Cavo M, Blade J, et al. Overall survival with daratumumab, bortezomib, melphalan, and prednisone in newly diagnosed multiple myeloma (ALCYONE): a randomised, open-label, phase 3 trial. Lancet 2020 Jan 11;395(10218):132-41.

Mateos MV, Nahi H, Legiec W, et al. Subcutaneous versus intravenous daratumumab in patients with relapsed or refractory multiple myeloma (COLUMBA): a multicentre, open-label, non-inferiority, randomised, phase 3 trial. Lancet Haematol. 2020 May;7(5):e370-e380.

Nooka AK, Gleason C, Sargeant MO, et al. Managing infusion reactions to new monoclonal antibodies in multiple myeloma: daratumumab and elotuzumab. J Oncol Pract 2018 Jul;14(7):414-22.

pCODR Expert review committee final recommendation: Daratumumab for the treatment of patients with newly diagnosed multiple myeloma. Aug 29, 2019.

PEBC Advice Documents or Guidelines

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

September 2022 Modified Drug Regimen section

back to top

M - Disclaimer

Regimen Abstracts

A 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). It is intended for healthcare providers and is to be used for informational purposes only. It is not intended to constitute or be a substitute for medical advice, and all uses of the Regimen Abstract are subject to clinical judgment. Such information is provided on an "as-is" basis, without any representation, warranty, or condition, whether express, or implied, statutory or otherwise, as to the information's quality, accuracy, currency, completeness, or reliability, and Cancer Care Ontario disclaims all liability for the use of this information, and for any claims, actions, demands or suits that arise from such use.

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.

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.

The format and content of the drug monographs, regimen monographs, appendices and symptom management information contained in the Formulary will change as they are reviewed and revised on a periodic basis. The date of last revision will be visible on each page of the monograph and regimen. Since standards of usage are constantly evolving, it is advised that the Formulary not be used as the sole source of information. It is strongly recommended that original references or product monograph be consulted prior to using a chemotherapy regimen for the first time.

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.

While care has been taken in the preparation of the information contained in the Formulary, such information is provided on an "as-is" basis, without any representation, warranty, or condition, whether express, or implied, statutory or otherwise, as to the information's quality, accuracy, currency, completeness, or reliability.

CCO and the Formulary's content providers shall have no liability, whether direct, indirect, consequential, contingent, special, or incidental, related to or arising from the information in the Formulary or its use thereof, whether based on breach of contract or tort (including negligence), and even if advised of the possibility thereof. Anyone using the information in the Formulary does so at his or her own risk, and by using such information, agrees to indemnify CCO

and its content providers from any and all liability, loss, damages, costs and expenses (including legal fees and expenses) arising from such person's use of the information in the Formulary.

back to top