

## Regimen Monograph

[Regimen Name](#) | [Drug Regimen](#) | [Cycle Frequency](#) | [Premedication and Supportive Measures](#) | [Dose Modifications](#) | [Adverse Effects](#) | [Interactions](#) | [Drug Administration and Special Precautions](#) | [Recommended Clinical Monitoring](#) | [Administrative Information](#) | [References](#) | [Other Notes](#) | [Disclaimer](#)

## A - Regimen Name

## PEMB(MNT) Regimen

Pembrolizumab (Maintenance)

**Disease Site**      Gynecologic  
Endometrial

**Intent**              Adjuvant  
Curative  
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.

**Rationale and Uses**              Maintenance treatment after CRBPACL+PEMB in patients with primary advanced or recurrent endometrial carcinoma

[back to top](#)

**B - Drug Regimen**

**As maintenance treatment after CRBPPACL+PEMB:**

[pembrolizumab](#)

400 mg

IV

Day 1

(This drug is not currently publicly funded for this regimen and intent)

[back to top](#)

**C - Cycle Frequency**

**REPEAT EVERY 6 WEEKS**

Continue until disease progression or unacceptable toxicity, up to a maximum of 14 maintenance cycles

[back to top](#)

**D - Premedication and Supportive Measures**

**Antiemetic Regimen:**

Minimal

- Also refer to [CCO Antiemetic Recommendations](#).

**Premedication (prophylaxis for infusion reactions):**

- Routine pre-medication is not recommended.
- May consider antipyretic and H1-receptor antagonist in patients who experienced a grade 1-2 infusion reaction.

[back to top](#)

## E - Dose Modifications

Doses should be modified according to the protocol by which the patient is being treated.

### **Dosage with toxicity**

Healthcare professionals should also consult the most recent pembrolizumab product monograph for additional information.

There are no dose reductions for pembrolizumab. Doses are either delayed or discontinued with toxicity.

### **Summary of Principles of Management of immune-related adverse effects (irAEs)**

- Immune-related adverse effects (irAEs) are different in their presentation, onset and duration compared to conventional chemotherapy. Patient and provider education is essential.
- Initial irAE presentation can occur months after completion of treatment and affect multiple organs.
- Dose escalation or reduction is not recommended.
- If no other cause can be identified (such as infection), any new symptom should be considered immune-related and prompt treatment initiated.
- Organ-specific system-based toxicity management is recommended.

Refer to CCO's [Immune Checkpoint Inhibitor Toxicity Management Guideline](#) for detailed descriptions of Immune-related toxicities and their management.

### **Management of Infusion-related Reactions:**

Also refer to the CCO guideline for detailed description of [Management of Cancer Medication-Related Infusion Reactions](#).

Grade	Management	Re-challenge
1 or 2	<ul style="list-style-type: none"> <li>• Stop or slow the infusion.</li> <li>• Manage the symptoms.</li> </ul>	<ul style="list-style-type: none"> <li>• Consider re-challenge with close monitoring and pre-medications (antipyretic and H1-receptor antagonist).</li> </ul>

	<b>Restart:</b> <ul style="list-style-type: none"> <li>No specific recommendations can be made at this time.</li> </ul>	
3 or 4	<ul style="list-style-type: none"> <li>Stop the infusion.</li> <li>Aggressively manage symptoms.</li> </ul>	<ul style="list-style-type: none"> <li>Discontinue permanently (do not re-challenge).</li> </ul>

### **Hepatic Impairment**

Refer to CCO's [Immune Checkpoint Inhibitor Toxicity Management Guideline](#) for detailed descriptions for immune-related hepatitis management.

Impairment	Pembrolizumab Dose
Mild (bilirubin 1 - 1.5 x ULN or AST > ULN)	No dose adjustment necessary
Moderate (bilirubin >1.5 - 3 x ULN and any AST) to severe (bilirubin > 3 x ULN and any AST)	Caution; no data

### **Renal Impairment**

Refer to CCO's [Immune Checkpoint Inhibitor Toxicity Management Guideline](#) for detailed descriptions for immune-related nephritis management.

CrCl (mL/min)	Pembrolizumab Dose
≥ 60	No dose adjustment necessary
30 to 59	No dose adjustment necessary
< 30	Caution; no data

---

**Dosage in the Elderly**

No dosage adjustment is required. No differences in safety or efficacy were reported between patients aged 65 and older and younger patients.

[back to top](#)

**F - Adverse Effects**

Refer to [pembrolizumab](#) drug monograph(s) for additional details of adverse effects.

Common (25-49%)	Less common (10-24%)	Uncommon (< 10%), but may be severe or life-threatening
<ul style="list-style-type: none"> <li>Fatigue</li> </ul>	<ul style="list-style-type: none"> <li>Diarrhea (may be severe)</li> <li>Rash / pruritus</li> <li>Nausea / vomiting</li> <li>Musculoskeletal pain</li> </ul>	<ul style="list-style-type: none"> <li>Myocarditis</li> <li>Colitis</li> <li>Anemia</li> <li>Hemolytic anemia</li> <li>Myelosuppression ± infection, bleeding</li> <li>Hepatitis</li> <li>Pancreatitis</li> <li>Sclerosing cholangitis</li> <li>Infusion-related reaction</li> <li>Hemophagocytic lymphohistiocytosis</li> <li>Sarcoidosis</li> <li>Graft loss - solid organ transplant recipients</li> <li>Hyper / hypothyroidism</li> <li>Hyperglycemia</li> <li>Hypopituitarism / hypophysitis</li> <li>Adrenal insufficiency</li> <li>Encephalitis</li> <li>Guillain-Barre syndrome</li> <li>Myositis, myasthenia</li> <li>Eye disorders</li> <li>Nephritis / nephrotoxicity</li> <li>Pneumonitis</li> <li>Vasculitis</li> <li>Vogt-Koyanagi-Harada syndrome</li> <li>Stevens-Johnson syndrome</li> <li>Toxic epidermal necrolysis</li> </ul>

[back to top](#)

**G - Interactions**

Refer to [pembrolizumab](#) drug monograph(s) for additional details

- Pembrolizumab is not expected to have pharmacokinetic drug-drug interactions as it is not metabolized by drug metabolizing enzymes.
- Use of systemic corticosteroids or immunosuppressants should be avoided prior to starting pembrolizumab because of potential interference with efficacy. They can be used to treat immune-mediated reactions after starting the drug. Corticosteroids may be used as premedication (e.g. antiemetic) when given with chemotherapy.

[back to top](#)

## H - Drug Administration and Special Precautions

Refer to [pembrolizumab](#) drug monograph(s) for additional details

### Administration

- Dilute in 0.9% sodium chloride or D5W to final concentration of 1 to 10 mg/mL; mix by gentle inversion.
- Administer over 30 minutes using sterile, non-pyrogenic, low protein-binding 0.2 to 5 micron in-line or add-on filter.
- Do not co-administer other drugs through the same infusion line.
- If a planned dose is missed, administer as soon as possible. Adjust the schedule to maintain the prescribed dosing interval.
- Vials should be stored under refrigeration (2 to 8°C). Do not freeze.

Also refer to the CCO guideline for detailed description of [Management of Cancer Medication-Related Infusion Reactions](#).

### Contraindications

- Patients who have a hypersensitivity to this drug or any of its components.

### Warnings/Precautions

- Patients with active infection, autoimmune disease, conditions that require systemic immunosuppressive therapy (i.e. transplant patients) and a history of pneumonitis, severe immune-mediated adverse reactions with ipilimumab or severe hypersensitivity to other monoclonal antibodies, etc. were excluded from clinical studies.
- Pembrolizumab may cause serious immune-mediated reactions affecting multiple organ

---

systems, including GI, hepatic, renal, respiratory, endocrine and others. Use with caution and monitor closely in patients with pre-existing conditions such as colitis, hepatic impairment, respiratory or endocrine disorders, such as hypo or hyperthyroidism or diabetes mellitus.

- Patients with ECOG performance status  $\geq 2$  were excluded from clinical trials.
- Use of a PD-1 or PD-L1 blocking antibody with a thalidomide analogue plus dexamethasone is not recommended outside of controlled clinical trials, due to increased mortality reported.

### **Pregnancy/Lactation**

- This regimen is not recommended for use in pregnancy. Adequate contraception should be used by patients and their partners while on treatment and after the last treatment dose. Recommended methods and duration of contraception may differ depending on the treatment. Refer to the drug monograph(s) for more information.
- Breastfeeding is not recommended during this treatment and after the last treatment dose. Refer to the drug monograph(s) for recommendations after the last treatment dose (if available).
- Fertility effects: Unknown

[back to top](#)

## **I - Recommended Clinical Monitoring**

Treating physicians may decide to monitor more or less frequently for individual patients but should always consider recommendations from the product monograph.

### Recommended Clinical Monitoring

- Liver function tests; Baseline, before each dose and as clinically indicated; frequent with severe toxicity
- Renal function tests; Baseline, before each dose and as clinically indicated; frequent with severe toxicity
- Thyroid function tests; Baseline, before each dose and as clinically indicated
- Electrolytes; Baseline, before each dose and as clinically indicated
- Blood glucose; Baseline, before each dose and as clinically indicated
- CBC; Baseline and as clinically indicated



- Clinical toxicity assessment for infusion-related and immune-mediated reactions, fatigue, ocular, endocrine, skin, GI, neurologic, musculoskeletal, cardiac and respiratory effects; At each visit
- Grade toxicity using the current [NCI-CTCAE \(Common Terminology Criteria for Adverse Events\) version](#)

[back to top](#)

## J - Administrative Information

Approximate Patient Visit	0.75 hour
Pharmacy Workload (average time per visit)	19.75 minutes
Nursing Workload (average time per visit)	40.75 minutes

[back to top](#)

## K - References

Eskander RN, Sill MW, Beffa L, et al. Pembrolizumab plus Chemotherapy in Advanced Endometrial Cancer. N Engl J Med 2023 Jun 8;388(23):2159-70. doi: 10.1056/NEJMoa2302312.

Pembrolizumab drug monograph. Ontario Health (Cancer Care Ontario).

**May 2025** new ST-QBP regimen

[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](#)