

# B.C. Ministry of Health Services Drug Coverage Decisions

<b>About PharmaCare</b>	B.C. PharmaCare helps British Columbians with the cost of eligible prescription drugs and specific medical supplies.
<b>PharmaCare Coverage</b>	The Ministry of Health Services (Ministry) makes PharmaCare coverage decisions by considering existing PharmaCare policies, programs and resources and the evidence-informed recommendations of an independent advisory body called the Drug Benefit Council (DBC). The DBC's advice to the Ministry is based upon a review of many considerations, including available clinical and pharmaco-economic evidence, clinical practice and ethical considerations, and the recommendations of the national Common Drug Review, when applicable.
<b>Inside</b>	<b>Page 1</b> includes the Ministry's decision and reasons in wording that is easier for readers without a medical background to understand. <b>Pages 2 and 3</b> summarize the DBC recommendation, the Ministry's decision and the reasons for the Ministry's decision.

## Aprepitant (Emend®) for prevention of vomiting in patients with cancer

### Understanding the DBC Recommendation and PharmaCare Coverage Decision

#### Background

- Patients with cancer may be treated with special drugs called chemotherapy. Nausea and vomiting are common side effects of cancer chemotherapy. Certain chemotherapy is more likely to cause severe vomiting.
- **Aprepitant** has the brand name **Emend®**.
  - Aprepitant belongs to the drug class called **antiemetics** or **neurokinin 1 (NK<sub>1</sub>) receptor antagonists**. It is used to prevent nausea and vomiting caused by chemotherapy. It works by blocking neurokinin, a substance in the brain that causes nausea and vomiting.
- **Ondansetron** and **dexamethasone** are also drugs used to prevent vomiting caused by cancer chemotherapy. These drugs are already covered by PharmaCare and are used together with aprepitant.

#### Why was this drug reviewed?

- Drug company request.

#### What did the review find?

- Studies in patients treated with certain kinds of cancer chemotherapy (expected to cause severe vomiting) show that adding aprepitant to ondansetron plus dexamethasone is more effective for preventing vomiting than ondansetron plus dexamethasone alone.

- Studies show that patients who receive aprepitant experience less nausea and vomiting than patients who do not receive aprepitant.
- Aprepitant is not cost-effective for patients receiving chemotherapy that causes less severe vomiting.
- The cost per treatment of aprepitant depends on the number of days of therapy (usually one to four days).

#### What decision was made?

- Aprepitant capsules will have **limited coverage** for: preventing nausea and vomiting in patients receiving chemotherapy expected to cause severe vomiting.

#### Key Term(s)

- **Limited Coverage drugs** are not normally considered the first choice in treatment, or other drugs may offer better value. To receive coverage, the patient's physician must submit a Special Authority request to PharmaCare. If the request is approved, the drug is covered up to the usual PharmaCare coverage limits. Actual reimbursement depends on the rules of a patient's PharmaCare plan, including any annual deductible requirement.

This document is intended for information only. It does not take the place of advice from a physician or other qualified health care provider.

Please visit us online to find out more about the Pharmaceutical Services Division and the PharmaCare program at [www.health.gov.bc.ca/pharmacare](http://www.health.gov.bc.ca/pharmacare). To find out more about how drugs are considered for PharmaCare coverage, visit [www.health.gov.bc.ca/pharmacare/formulary](http://www.health.gov.bc.ca/pharmacare/formulary).

## Aprepitant (Emend®) for highly emetogenic cancer chemotherapy

### Drug Class

- Antiemetic (Neurokinin 1 (NK1) receptor antagonist)

### Available Dosage Forms

- 80 mg and 125 mg capsules

### Sponsor/Requestor

- Merck Frosst Canada Ltd.

### Submission (Request) to PharmaCare

- Drug review of aprepitant for the following Health Canada Approved indication:
  - For the prevention of acute and delayed nausea and vomiting due to highly emetogenic cancer chemotherapy; and the prevention of nausea and vomiting in women due to treatment with moderately emetogenic cancer chemotherapy consisting of cyclophosphamide and an anthracycline. Aprepitant is approved for use in combination with a 5-HT<sub>3</sub> antagonist class of antiemetics and dexamethasone.

### Drug Benefit Council (DBC) Recommendations

- Aprepitant be listed as a limited coverage drug with the following Special Authority criteria:
  - For the prevention of acute and delayed nausea and vomiting due to highly emetogenic cancer chemotherapy, in combination with 5-HT<sub>3</sub> antagonist and dexamethasone; may start with the first cycle of chemotherapy.
- Aprepitant not be listed for the treatment of nausea and vomiting with moderately emetogenic cancer chemotherapy.

### Reasons for the Ministry of Health Services Decision

- A literature search identified three randomized controlled trials (RCTs) in patients receiving highly emetogenic cancer chemotherapy. In all trials, aprepitant or placebo were added to treatment with ondansetron and dexamethasone. Treatment outcomes were only assessed during the first cycle of chemotherapy.

- The primary outcome of all three RCTs was complete response, a composite endpoint defined as: no emesis and no rescue therapy during the five days after initiation of chemotherapy. All three RCTs reported that aprepitant resulted in statistically significant and clinically important improvements in complete response during the acute phase, delayed phase, and overall. All three RCTs also reported that aprepitant resulted in a statistically significant reduction in the number of patients with emesis during the acute phase, delayed phase, and overall.
- Two RCTs assessed health-related quality of life outcomes. The number of patients reporting that chemotherapy-induced nausea and vomiting had no negative impact on daily life was statistically significantly higher in the aprepitant group compared with the control group.
- Two of the three RCTs reported that aprepitant resulted in statistically significant reductions in the number of patients requiring rescue therapy during the acute phase, delayed phase, and overall.
- In the identified RCTs, there was no significant difference between aprepitant and placebo in serious adverse events or withdrawals due to adverse events.
- In patients with highly emetogenic cancer chemotherapy, the incremental cost-effectiveness of aprepitant depended on whether one or four days of the 5-HT<sub>3</sub> antagonist was used, ranging from \$21,000 to \$101,000 per quality-adjusted life year (QALY).
- Aprepitant has not been shown to be cost-effective in patients receiving moderately emetogenic chemotherapy.
- The limited coverage criteria was based on the recommendation of the DBC and consultations with external clinicians.

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## Aprepitant (Emend®) for highly emetogenic cancer chemotherapy

(continued from page 2)

### Decision and Status

#### Limited coverage criteria:

- For the prevention of acute and delayed nausea and vomiting due to highly-emetogenic cancer chemotherapy **in combination with a 5-HT<sub>3</sub> antagonist and dexamethasone.**

#### Approval Period/Duration:

- Up to a maximum number of standard, planned treatment cycles of highly-emetogenic cancer chemotherapy (usually six or fewer treatment cycles), as specified in the relevant BC Cancer Agency chemotherapy protocol.

#### Notes:

1. Highly-emetogenic chemotherapy is defined as greater than 90% of patients experiencing emesis if not treated. Emetogenicity of chemotherapy is determined in accordance with the BC Cancer Agency's Cancer Drug Manual for single agent chemotherapy and with the BC Cancer Agency's chemotherapy protocols for combination chemotherapy (see individual protocols for assessment of emetogenicity and SCNAUSEA supportive care protocol rating). The SCNAUSEA supportive care protocol is available at: [www.bccancer.bc.ca/HPI/ChemotherapyProtocols/SupportiveCare/default.htm](http://www.bccancer.bc.ca/HPI/ChemotherapyProtocols/SupportiveCare/default.htm)
2. Coverage is not intended for the treatment of nausea and vomiting with cancer therapy of high-moderate, low-moderate, low or rare emetogenicity. However, exceptional case coverage requests may be submitted to PharmaCare.

Exceptional case submissions are required for all patients who do not meet the above Limited Coverage criteria, from all physicians (including those with specialist exemption).

#### Specialist Exemptions:

- Medical oncologists, gynecologic oncologists and general practitioners in oncology will be invited to apply for specialist exemption from completing Special Authority forms. See the Collaborative Prescribing Agreement available in the Special Authority section of the PharmaCare website at [www.health.gov.bc.ca/pharmacare/sa/saindex.html](http://www.health.gov.bc.ca/pharmacare/sa/saindex.html)
- Effective March 16, 2010

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