



EUROPEAN MEDICINES AGENCY  
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## **EPAR summary for the public**

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# Emend

## aprepitant

This is a summary of the European public assessment report (EPAR) for Emend. It explains how the Committee for Medicinal Products for Human Use (CHMP) assessed the medicine to reach its opinion in favour of granting a marketing authorisation and its recommendations on the conditions of use for Emend.

### **What is Emend?**

Emend is a medicine containing the active substance aprepitant. It is available as capsules (40, 80, 125 and 165 mg) and as a powder to be made up into an oral (by mouth) suspension (125 mg).

### **What is Emend used for?**

Emend is an antiemetic, a medicine that prevents nausea (feeling sick) and vomiting.

Emend is used with other medicines to prevent nausea and vomiting caused by chemotherapy (medicines used to treat cancer). It is used with chemotherapy that is a moderate or high trigger of nausea and vomiting such as cisplatin, cyclophosphamide, doxorubicin or epirubicin. Emend makes chemotherapy more tolerable for the patient.

Emend 80, 125 and 165 mg capsules are used in adults; children from 12 years of age may be given the 80- or 125-mg capsules and children between 6 months and 12 years of age are given the oral suspension.

Emend 40 mg capsules are used to prevent postoperative nausea and vomiting (PONV) in adults. This is nausea and vomiting that a patient can experience after surgery.

The medicine can only be obtained with a prescription.

### **How is Emend used?**

In chemotherapy, the usual dose of Emend in adults and children from 12 years of age is one 125 mg capsule by mouth one hour before the start of chemotherapy. After chemotherapy, one 80 mg capsule



is taken each day for the next two days. It must be given with other medicines that also prevent nausea and vomiting, including a corticosteroid (such as dexamethasone) and a '5-HT<sub>3</sub> antagonist' (such as ondansetron).

Emend 165 mg is given to adults only once, one hour before the start of chemotherapy. It is only given on the first day of the chemotherapy and is followed by treatment involving a corticosteroid and a 5-HT<sub>3</sub> antagonist.

In children between 6 months and 12 years of age, Emend oral suspension is given together with a 5-HT<sub>3</sub> antagonist. The dose of Emend oral suspension to be given depends on the patient's bodyweight. Emend oral suspension is given one hour before the start of chemotherapy, and for the next 2 days.

In PONV, the usual dose is one 40 mg capsule given to adults within the three hours before the patient is anaesthetised ('put to sleep').

### **How does Emend work?**

Emend is a neurokinin 1 (NK1) receptor antagonist. It stops a chemical in the body (substance P) from binding to the NK1 receptors. When substance P attaches to these receptors, it causes nausea and vomiting. By blocking the receptors, Emend can prevent nausea and vomiting, which often happens after chemotherapy or as a complication of surgery.

### **How has Emend been studied?**

In chemotherapy, three main studies have been carried out for Emend 80 and 125 mg capsules. The first two studies involved a total of 1,094 adults receiving chemotherapy including cisplatin, and the third involved 866 adults with breast cancer who were receiving cyclophosphamide, with or without doxorubicin or epirubicin. All three studies compared the effectiveness of Emend, taken in combination with dexamethasone and ondansetron, with that of the standard combination of dexamethasone and ondansetron. The main measure of effectiveness was the number of patients who had no nausea and vomiting in the five days after receiving chemotherapy.

A fourth study has been carried out with Emend (125 mg capsules or 125 mg oral solution) in 307 children from 6 months to 17 years of age, where Emend, taken with ondansetron (with or without dexamethasone), was compared with ondansetron alone (with or without dexamethasone). The main measure of effectiveness was based on how many patients had a 'complete response', which was defined as no vomiting, retching or dry heaves and no need for any other medication to control nausea and vomiting 25 to 120 hours after the start of chemotherapy (delayed phase). The study also looked at how many patients achieved a complete response in the first 24 hours after chemotherapy (acute phase).

Emend 165 mg capsules were compared with the authorised intravenous medicine Ivemend 150 mg. Ivemend contains a substance called fosaprepitant which is converted in the body into aprepitant. Tests were performed to determine that Emend 165 mg produces the same amount of aprepitant in the body as a single dose of 150 mg Ivemend.

In PONV, two studies were carried out in a total of 1,727 adult patients, most of whom were women undergoing gynaecological operations. Two doses of Emend (40 and 125 mg as capsules) were compared with ondansetron given as an injection. The studies measured how many patients had a complete response, which was defined as no vomiting and no need for any other medication to control nausea and vomiting in the 24 hours after the operation.

## **What benefit has Emend shown during the studies?**

In the chemotherapy studies in adults, adding Emend to the standard combination was more effective than the standard combination alone. Looking at the results of the two cisplatin studies taken together, 68% of the patients taking Emend had no nausea or vomiting over five days (352 out of 520), compared with 48% of the patients who did not take it (250 out of 523). The effectiveness of Emend was also seen during a further five cycles of chemotherapy. In the study of chemotherapy that is a moderate trigger of nausea and vomiting, 51% of the patients taking Emend had no nausea or vomiting (220 out of 433), compared with 43% of the patients who did not take it (180 out of 424).

In the study in children, around 51% (77 out of 152) of children given Emend with ondansetron had a complete response 25 to 120 hours after beginning chemotherapy, compared with 26% (39 out of 150) of children given ondansetron alone. Emend was also shown to be effective in the first 24 hours after chemotherapy.

Emend 165 mg capsules were shown to be bioequivalent to Ivemend 150 mg, which means that like Ivemend it can also be used to prevent nausea and vomiting caused by chemotherapy.

In PONV, Emend was as effective as ondansetron. Looking at the results of both studies together, 55% of the patients (298 out of 541) taking Emend capsules at a dose of 40 mg had a complete response, compared with 49% of the patients who received ondansetron (258 out of 526).

## **What is the risk associated with Emend?**

The most common side effect of Emend at all doses in adults (seen in between 1 and 10 patients in 100) is increased liver enzymes. At a dose of 80, 125 and 165 mg, the other side effects seen in between 1 and 10 patients in 100 are headache, hiccups, constipation, dyspepsia (indigestion), loss of appetite, and fatigue (tiredness). In children, the most common side effects are hiccups and flushing. For the full list of all side effects reported with Emend, see the package leaflet.

Emend 80 mg and 125 mg must not be taken with the following medicines:

- pimozone (used to treat mental illness);
- terfenadine, astemizole (commonly used to treat allergy symptoms - these medicines may be available without a prescription);
- cisapride (used to relieve certain stomach problems).

For the full list of restrictions with Emend, see the package leaflet.

## **Why has Emend been approved?**

The CHMP decided that Emend's benefits are greater than its risks and recommended that it be given marketing authorisation.

## **What measures are being taken to ensure the safe and effective use of Emend?**

A risk management plan has been developed to ensure that Emend is used as safely as possible. Based on this plan, safety information has been included in the summary of product characteristics and the package leaflet for Emend, including the appropriate precautions to be followed by healthcare professionals and patients.

## **Other information about Emend**

The European Commission granted a marketing authorisation valid throughout the European Union for Emend on 11 November 2003.

The full EPAR for Emend can be found on the Agency's website: [ema.europa.eu/Find\\_medicine/Human\\_medicines/European\\_Public\\_Assessment\\_Reports](http://ema.europa.eu/Find_medicine/Human_medicines/European_Public_Assessment_Reports). For more information about treatment with Emend, read the package leaflet (also part of the EPAR) or contact your doctor or pharmacist.

This summary was last updated in 11-2015.