

## PHARMACY

### Drug Information

# Medications to Prevent Nausea and Vomiting Due to Cancer Treatment



### What is Nausea and Vomiting?

- Nausea is the sensation of feeling ill or sick to your stomach, while vomiting is the act of throwing up or puking.

### What causes Nausea and Vomiting?

- Nausea and vomiting may be caused by the cancer itself, or the cancer treatments such as chemotherapy, radiation therapy or surgery.
- An area of the brain called the vomiting centre controls nausea and vomiting. Nausea or vomiting happens when the vomiting centre is stimulated.
- It may be stimulated by:
  - Nerves in the gut (stomach);
  - Another part of the brain called the chemoreceptor trigger zone (CTZ);
  - Inner ear, which is caused by body motion;
  - Our senses, for example, taste, smell and pain;
  - Our emotions, for example, if we are scared or nervous.

### What are the Medications Used to Treat Nausea and Vomiting?

- There are different types of medicines that can help treat nausea and vomiting. These are called anti-sickness medicines.
- If you are having a cancer treatment which is known to cause nausea and vomiting, you may start taking anti-sickness medicines before your treatment begins.
- It is often easier to control and prevent nausea if you take anti-sickness drugs regularly, rather than treating the nausea after it has started. If you have any new nausea or vomiting, or your nausea and vomiting becomes worse or lasts for more than a few days, inform your doctor immediately.

Medication Class	Medication Name
Neurokinin-1 (NK <sub>1</sub> ) receptor antagonists	<ul style="list-style-type: none"> <li>Aprepitant (Emend®)</li> <li>Netupitant (contained in Akynzeo®)</li> </ul>
Corticosteroids	<ul style="list-style-type: none"> <li>Dexamethasone</li> </ul>
5-HT <sub>3</sub> receptor antagonists	<ul style="list-style-type: none"> <li>Ondansetron</li> <li>Palonosetron (contained in Akynzeo®)</li> </ul>
Prokinetic agents	<ul style="list-style-type: none"> <li>Metoclopramide</li> <li>Domperidone</li> </ul>
Phenothiazines	<ul style="list-style-type: none"> <li>Prochlorperazine</li> </ul>
Atypical Antipsychotic	<ul style="list-style-type: none"> <li>Olanzapine</li> </ul>
Benzodiazepines	<ul style="list-style-type: none"> <li>Alprazolam</li> <li>Lorazepam</li> </ul>
Butyrophenones	<ul style="list-style-type: none"> <li>Haloperidol</li> </ul>

#### How are the Medications Administered / Taken?

- If you miss a dose, take the missed dose as soon as you remember. If it is almost time for your next dose, take only the usual dose. Do not double the dosage.

#### Can the Medications be Administered / Taken With Other Medications?

- Please inform your doctor or pharmacist if you are taking other medications, including supplements, traditional or herbal remedies.

#### What are the Important Side Effects?

- Medications prescribed by your doctor should be beneficial for your condition even though they may result in some inevitable side effects.

Side Effect	Medication Class	Management
Headache Constipation Fatigue	Neurokinin-1 (NK1) receptor antagonists	<ul style="list-style-type: none"> <li>May take Paracetamol to relieve headache.</li> <li>Take more fibre and drink more water to help with constipation.</li> <li>Inform your doctor if symptoms persist.</li> </ul>
Insomnia Raised blood sugar level Weight gain/ increased appetite Indigestion/stomach irritation Hiccups Mood changes	Corticosteroids	<ul style="list-style-type: none"> <li>Take the last dose by 2 to 4 pm to avoid insomnia.</li> <li>Please inform your doctor immediately if symptoms of hyperglycemia occur e.g. frequent urination, feeling thirsty.</li> <li>Take the medication after food to prevent stomach irritation.</li> <li>Inform your doctor if symptoms persist.</li> </ul>

Side Effect	Medication Class	Management

Headache Hiccups Constipation	5-HT <sub>3</sub> receptor antagonists	<ul style="list-style-type: none"> <li>• May take Paracetamol to relieve headache.</li> <li>• Take more fibre and drink more water to help with constipation.</li> <li>• Inform your doctor if symptoms persist.</li> </ul>
Diarrhoea Drowsiness Uncontrolled movements e.g. irregular eye movements, abnormal posture such as twisted neck, trembling and muscle stiffness	Prokinetic agents	<ul style="list-style-type: none"> <li>• Do not drive or operate machinery when feeling drowsy.</li> <li>• Inform your doctor immediately if symptoms of uncontrolled movements occur.</li> </ul>
Drowsiness Skin may be more sensitive to sunlight	Phenothiazines	<ul style="list-style-type: none"> <li>• Do not drive or operate machinery if feeling drowsy.</li> <li>• Avoid exposure to direct sunlight while taking this medicine.</li> <li>• Inform your doctor if symptoms persist.</li> </ul>

Drowsiness Uncontrolled movements	Atypical antipsychotic; Butyrophenones	<ul style="list-style-type: none"> <li>• Do not drive or operate machinery if feeling drowsy.</li> <li>• Inform your doctor if symptoms persist.</li> </ul>
Drowsiness Confusion Muscle weakness	Benzodiazepines	<ul style="list-style-type: none"> <li>• Do not drive or operate machinery if feeling drowsy.</li> <li>• Inform your doctor if symptoms persist.</li> </ul>

If you develop rashes, facial swelling or shortness of breath after taking the medication, you could be allergic to the medication. Please seek medical attention immediately.

#### Are There any Special Precautions That I Need to Take?

- It is important to inform your doctor if you intend to conceive or breastfeed while taking this medication.
- Avoid taking alcohol with medicines that can cause drowsiness.

#### When should I seek medical attention?

*Please proceed to the A&E department if you:*

- You have nausea that lasts for more than a few days, or if nausea keeps you from doing things that are important to you.
- You throw up large amounts more than twice per day.
- You cannot keep any liquids e.g water, juices, soups or food down.
- You cannot keep your drugs down.
- You are throwing up many times and your urine is dark yellow and you are not going to the bathroom as often as you usually do.
- You are throwing up and feel weak or dizzy.
- You throw up coffee-ground vomitus (this could be blood).

#### What Else can I do to Help My Condition?

Side Effect	Medication Class	Management

### Eating tips

- Eat small amounts of food throughout the day and eat before you get too hungry.
- Eat dry foods such as dry cereal, toast, or crackers without liquids first thing in the morning.
- Consider eating ginger sweets or drinking ginger tea.
- Avoid heavy, high fat and greasy meals right before chemotherapy. Avoid eating too hot and spicy food as they irritate the stomach and may result in vomiting.
- Do not lay flat immediately after eating. Rest by sitting up or reclining with your head elevated.

### Fluids

- Maintain adequate hydration with 2 to 3 litres (8 to 12 cups) of fluids (water or juices or soup) per day unless informed by your doctor to restrict fluids.
- Avoid during liquids at meals as you might be too bloated.

### Distraction

- Relax and try to keep your mind off the chemotherapy by listening to music, reading, watching TV. Try not to be too anxious before your chemotherapy.

### Surroundings

- Avoid strong odours of food. Fresh air and loose clothing may be helpful after eating.

### Other tips to minimise chemotherapy nausea

- If you are vomiting, stop eating. Once you stop vomiting, start back on food slowly. Start with small amounts of clear liquids, such as soup, juices, sports drinks, or water. Then, advance to light, mild foods like puddings, bananas, rice, or toast. Soon, you can be back to solid foods.
- Avoid caffeine and smoking.
- Suck on hard sugar-free candy during chemotherapy.

- Take the medications for nausea and vomiting as prescribed by your doctor. If you are running low, ask for a refill.
- Notify your nurse or doctor if you feel nauseated during chemotherapy.

### **How do I Store these Medications?**

- Store your medication in a cool, dry place away from heat, moisture and direct sunlight.

If you have any problem with your treatment, please contact your doctor, pharmacist or nurse clinician.

Please keep all medications out of reach of children.

You can also find useful information with regards to your medication on this website:

<https://www.macmillan.org.uk/information-and-support>



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