Anti-emetic Prescribing Advice

Licensed indications differ for each of the respective agents:

<table>
<thead>
<tr>
<th>General Nausea &amp; vomiting (N&amp;V)</th>
<th>Motion sickness</th>
<th>Vertigo</th>
<th>N&amp;V in Meniere's disease</th>
<th>Chemotherapy induced N&amp;V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prochlorperazine</td>
<td>Promethazine</td>
<td>Cinnarizine</td>
<td>Betaistine</td>
<td>Ondansetron</td>
</tr>
<tr>
<td>Promethazine</td>
<td>Cinnarizine</td>
<td>Prochlorperazine</td>
<td>Cinnarizine</td>
<td>Metoclopramide*</td>
</tr>
<tr>
<td>Cyclizine</td>
<td>Cyclizine</td>
<td>Cyclizine</td>
<td>Prochlorperazine</td>
<td></td>
</tr>
<tr>
<td>Domperidone*</td>
<td>Promethazine</td>
<td>Cyclizine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metoclopramide*</td>
<td></td>
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</tr>
</tbody>
</table>

*There are MHRA alerts for domperidone & metoclopramide (details overleaf), use other alternatives first

Assess each patient on an individual basis prior to making a decision on the most appropriate agent. Prescribers may also want to assess if there is an on-going need for an anti-emetic.

Cost for 7 days of maximum dose anti-emetics.
August 2015 Drug Tariff

<table>
<thead>
<tr>
<th>Medicated</th>
<th>Cost (GBP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metoclopramide 10mg tablets</td>
<td>£0.68</td>
</tr>
<tr>
<td>Domperidone 10mg tablets</td>
<td>£1.02</td>
</tr>
<tr>
<td>Cinnarizine 15mg tablets</td>
<td>£1.40</td>
</tr>
<tr>
<td>Prochlorperazine 5mg tablets</td>
<td>£1.68</td>
</tr>
<tr>
<td>Cyclizine 50mg tablets</td>
<td>£2.28</td>
</tr>
<tr>
<td>Promethazine teocloate 25mg</td>
<td>£3.13</td>
</tr>
<tr>
<td>Ondansetron 4mg tablets</td>
<td>£10.02</td>
</tr>
<tr>
<td>Ondansetron 8mg tablets</td>
<td>£10.39</td>
</tr>
<tr>
<td>Prochlorperazine 3mg buccal tablets</td>
<td>£14.77</td>
</tr>
<tr>
<td>Ondansetron 8mg lyophilisate</td>
<td>£201.43</td>
</tr>
<tr>
<td>Ondansetron 8mg orodispersible</td>
<td>£226.60</td>
</tr>
</tbody>
</table>

Useful information:

- **Cyclizine** can be abused for its euphoric or hallucinatory effects. Prescribers should exercise caution in prescribing to those with a history of addiction or abuse.
- **Promethazine** can produce false-positive or false-negative results on pregnancy tests.
- **Cyclizine & promethazine** may cause drowsiness. The degree of sedation varies and depends upon the dose given, but if affected, the patient should avoid driving or performing skilled tasks. Drowsiness may diminish after a few days of treatment.
- **Cyclizine & promethazine** are suitable for use in pregnancy. There is no increased risk of congenital abnormalities, above the background rate for the population
- **Prochlorperazine Buccal tablets** are useful for patients unable to swallow due to the nausea and vomiting, especially in migraine.
- **Metoclopramide, prochlorperazine & promethazine** may cause extrapyramidal symptoms (dystonia & tardive dyskinesia) in <1% of patients (esp. young women and the elderly)
- **Ondansetron** (like domperidone) has a risk of QT prolongation and therefore has contra-indications and significant interactions due to this. (See BNF or SPC)
- **Ondansetron orodispersible or lyophilisate** are significantly more expensive than the standard tablets and should be reserved for patients UNABLE to swallow and absorb (90minutes for full absorption).
Domperidone MHRA alert May 2014
Review of indication due to the small increased risk of serious cardiac side effects.

**Indication**
- Domperidone is now restricted to use in the relief of nausea and vomiting
- It should be used at the lowest effective dose for the shortest possible time
  - The maximum treatment duration should not usually exceed one week

**Contraindications**
- Domperidone is now contraindicated in people:
  - with conditions where cardiac conduction is, or could be, impaired
  - with underlying cardiac diseases such as congestive heart failure
  - receiving other medications known to prolong QT interval or potent CYP3A4 inhibitors
  - with severe hepatic impairment

- Advice relating to the use of domperidone to promote lactation has been produced by UKMI and can be found at the following link: http://www.midlandsmedicines.nhs.uk/filestore/S00003.pdf
- Advice relating to the use of domperidone in babies & children has been issued by the Neonatal & Paediatric Pharmacists Group and can be found on the following site: http://www.nppg.scot.nhs.uk/

Metoclopramide MHRA alert August 2013
Review of indications due to the confirmed risk of neurological effects such as short-term extrapyramidal disorders and tardive dyskinesia.

**Indications and use in adults and children**
- **In adults:** metoclopramide remains indicated for: prevention of postoperative nausea and vomiting; radiotherapy-induced nausea and vomiting; delayed (but not acute) chemotherapy-induced nausea and vomiting; and symptomatic treatment of nausea and vomiting, including that associated with acute migraine (where it may also be used to improve absorption of oral analgesics)
- **In children, age 1–18 years:** metoclopramide should only be used as a second-line option for prevention of delayed chemotherapy-induced nausea and vomiting, and for treatment of established postoperative nausea and vomiting
- Use of metoclopramide is contraindicated in children younger than 1 year
  - Metoclopramide should only be prescribed for short-term use (up to 5 days)

**The management of patients taking domperidone / metoclopramide long term for GORD, dyspepsia or gastroparesis**
- All patients receiving long-term domperidone or metoclopramide should have their therapy reviewed and risks explained to them.
- A trial of withdrawal of domperidone or metoclopramide therapy should be tried in all patients, with full patient engagement.
- **For GORD or dyspepsia:** ensure all other therapeutic and lifestyle options are optimised.
  - See Rotherham dyspepsia guidelines and use of a PPI
  - For people with a particular problem with nocturnal symptoms which does not respond to PPI therapy, consider adding histamine (H2)-receptor antagonist (H2RA) at bedtime in the short term (for example intermittent 2-week courses).
- **For gastroparesis:** ensure any iatrogenic cause is identified. Assess and correct nutritional state and, in patients with diabetes, check glycaemic control.
  - If symptoms return, a trial of ‘on-demand’ domperidone (10mg up to tds for up to one week) could be tried if appropriate. However ensure domperidone is not used in any of the new contra-indications mentioned above
  - An alternative anti-emetic agent (see list overleaf) may be used to control any symptomatic nausea and vomiting.