**Medication Policy Manual**

**Policy No:** dru467  
**Topic:** High cost proton pump inhibitors (PPIs)  
**Date of Origin:** October 21, 2016  
**Committee Approval Date:** October 21, 2016  
**Next Review Date:** October 2017  
**Effective Date:** January 1, 2017

**IMPORTANT REMINDER**

This Medication Policy has been developed through consideration of medical necessity, generally accepted standards of medical practice, and review of medical literature and government approval status.

Benefit determinations should be based in all cases on the applicable contract language. To the extent there are any conflicts between these guidelines and the contract language, the contract language will control.

The purpose of Medication Policy is to provide a guide to coverage. Medication Policy is not intended to dictate to providers how to practice medicine. Providers are expected to exercise their medical judgment in providing the most appropriate care.

**Description**

Proton pump inhibitors (PPIs) are a class of drug that inhibit the secretion of hydrogen ions into the stomach. The result is a decrease in the acidity (increase in the pH) of the stomach, which decreases symptoms and improves healing in acid-related disorders.

NOTE: This policy does not apply to over-the-counter (OTC) proton-pump inhibitors. Policy criteria for Vimovo® (esomeprazole/naproxen) can be found in dru447.
Policy/Criteria

I. Most contracts require prior authorization approval of certain high-cost proton pump inhibitors (PPIs) prior to coverage. High-cost PPIs may be considered medically necessary when criterion A, B, C or D below is met. For these criteria, ineffective is defined as gastric-peptic symptoms (such as heartburn) not resolved after ten consecutive days of treatment.

A. **PPI suspensions, packets, or dissolving tablets included in table 1 below** may be considered medically necessary when there is a medical reason in clinical documentation why alternate dose forms (such as capsules and tablets) are not a treatment option **AND** both alternatives listed in Table 1 have been ineffective, are contraindicated, or not tolerated.

Table 1. Dissolving tablets and packets for suspension

<table>
<thead>
<tr>
<th>High cost PPI</th>
<th>Alternatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>esomeprazole Mg for delayed release suspension (Nexium® packets)</td>
<td>First-Lansoprazole (lansoprazole suspension compound kit) <strong>AND</strong> First-Omeprazole (omeprazole suspension compound kit)</td>
</tr>
<tr>
<td>lansoprazole dissolving tab delayed release (Prevacid SoluTab®)</td>
<td></td>
</tr>
<tr>
<td>Omeprazole-containing suspension packets (Prilosec® packets, Zegerid® packets, generic omeprazole-sodium bicarbonate packets)</td>
<td></td>
</tr>
<tr>
<td>pantoprazole for delayed release suspension packet (Protonix® packets)</td>
<td></td>
</tr>
<tr>
<td>rabeprazole sprinkles (AcipHex Sprinkle Oral®)</td>
<td></td>
</tr>
</tbody>
</table>

OR

B. **Esomeprazole magnesium capsules (generic), esomeprazole strontium capsules (generic), and omeprazole-sodium bicarbonate capsules (generic)** may be considered medically necessary when treatment with three best value PPI's (listed in Appendix 1) has been ineffective, contraindicated, or not tolerated.

OR

C. **Dexilant** may be considered medically necessary when treatment with one best value generic PPI (listed in Appendix 1) has been ineffective, contraindicated, or not tolerated.

OR

D. **Branded PPIs listed in table 2 below** may be considered medically necessary when there is a documented intolerance or contraindication to an INACTIVE ingredient in the specified alternative in Table 2 below.
Table 2. Alternatives to select branded PPIs

<table>
<thead>
<tr>
<th>Branded PPI</th>
<th>Alternative</th>
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</thead>
<tbody>
<tr>
<td>AcipHex tablets</td>
<td>rabeprazole tablets</td>
</tr>
<tr>
<td>Nexium capsules</td>
<td>esomeprazole magnesium capsules (PA also required)</td>
</tr>
<tr>
<td>Prevacid capsules</td>
<td>lansoprazole capsules</td>
</tr>
<tr>
<td>Prilosec capsules</td>
<td>omeprazole capsules</td>
</tr>
<tr>
<td>Protonix tablets</td>
<td>pantoprazole tablets</td>
</tr>
<tr>
<td>Zegerid capsules</td>
<td>omeprazole – sodium bicarbonate capsules (PA also required)</td>
</tr>
</tbody>
</table>

II. Administration, Quantity Limitations, and Authorization Period
   A. OmedaRx considers all included PPIs to be self-administered medications.
   B. Authorization may be reviewed at least annually to confirm that current medical necessity criteria are met and that the medication is effective.

Position Statement

- All PPIs are considered therapeutically interchangeable in the treatment of gastroesophageal reflux disease (GERD), erosive esophagitis (EE), gastric duodenal ulcers, and eradication of H. pylori. [1,2]
- Comparative evidence among the PPI class is not useful. Common short-comings of these trials include: study design (power) that shows similarity of PPIs rather than superiority, PPI doses that are not equivalent, and use of gastric pH as an endpoint rather than a clinical endpoints (e.g. esophageal healing rates).
- Because there are no proven differences in efficacy or safety between proton pump inhibitors, the least costly PPI (such as omeprazole) is often the best value.
- Of the branded PPIs, dexlansoprazole (Dexilant) provides the best value and may be an option for patients when a generic lower-cost PPI is not effective, contraindicated, or not tolerated.
- Lansoprazole, esomeprazole (Nexium), and rabeprazole may give a more rapid onset of acid suppression correlating to earlier symptom relief. However, it is not known if the more "rapid onset" makes a clinically significant impact in reducing the number of physician office visits or preventing dosage increases or drug switches. [3-7]
- The clinical guidelines provide recommendations for the use of PPIs in dyspepsia/GERD with the intent of promoting appropriate dosing and length of therapy. Guidelines do not distinguish between PPI products, but recommends that "the least expensive appropriate PPI should be used". [3,8-10]
Clinical Efficacy
- Scientific literature does not consistently demonstrate the superiority of one PPI over another:
  * Various PPIs given once daily produced similar healing rates in patients with gastric and duodenal ulcers and ulcerative or erosive GERD. \[1,2\]
  * Comparative trials demonstrate only modest gains in EE healing rates with esomeprazole (93-96%) compared to lansoprazole (89%), pantoprazole (92%), and omeprazole (84-87%). \[11-16\]
  * Other head-to-head trials have demonstrated similar efficacy for esomeprazole (Nexium) when compared to omeprazole, lansoprazole, and pantoprazole. \[11,17-21\]
  * In patients with moderate to severe EE, observed healing rates were similar with esomeprazole and lansoprazole at the 8-week endpoint. \[22\]
- Proton pump inhibitors may be given to patients who are receiving non-steroidal antiinflammatory drugs for chronic pain and inflammation to decrease the risk of developing gastric ulcers.

Safety
- Adverse effects and safety profile among the PPIs are similar, with no advantage of one over another. \[1,2\]
- Potent inhibitors of CYP 2C19 (e.g. omeprazole, esomeprazole, cimetidine) may reduce the effectiveness of clopidogrel; current expert consensus of the American College of Cardiology Foundation, the American College of Gastroenterology, and the American Heart Association states that although concomitant use of a PPI and clopidogrel reduces the antiplatelet effect of clopidogrel, it is not established that this translates into a clinically meaningful effect. Concomitant use of clopidogrel and omeprazole is not recommended by the FDA. \[23,24\]
- Observational data suggests a possible association of PPI therapy with adverse effects including clostridium difficile infections; pneumonia; malabsorption of vitamin B-12, magnesium, iron, and calcium; hip fracture; kidney disease; and dementia. The FDA has recommended that providers prescribe the lowest dose and shortest duration of PPI therapy appropriate to the condition being treated. \[25-33\]

Dosing considerations
- Nexium 24HR OTC contains 20 mg of esomeprazole magnesium, equivalent to 20 mg esomeprazole contained in prescription-strength esomeprazole magnesium (Nexium).
- Prilosec OTC contains 20.6 mg of omeprazole magnesium, equivalent to 20 mg omeprazole contained in prescription-strength omeprazole (generic Prilosec). \[19\]
Appendix 1: Best Value Proton Pump Inhibitors (PPIs)

**Best Value Generic PPIs**

- lansoprazole (generic Prevacid)
- omeprazole (generic Prilosec)
- pantoprazole (generic Protonix)
- rabeprazole (generic AcipHex)

**Best Value Brand Name PPIs**

dexlansoprazole (Dexilant®)

References


5. Williams, MP, Sercombe, J, Hamilton, MI, Pounder, RE. A placebo-controlled trial to assess the effects of 8 days of dosing with rabeprazole versus omeprazole on 24-h intragastric acidity and plasma gastrin concentrations in young healthy male subjects. Alimentary pharmacology & therapeutics. 1998 Nov;12(11):1079-89. PMID: 9845397


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17. Nexium™ NDA, study 173. A multicenter, randomized, double-blind, eight-week comparative efficacy and safety study of esomeprazole 40mg and omeprazole 20mg in study subjects with erosive esophagitis. . AstraZeneca. 2001. PMID:


24. FDA Drug Safety Communication: Clostridium difficile-associated diarrhea can be associated with stomach acid drugs known as proton pump inhibitors (PPIs). Rockville, MD; 2016.


Revision History

<table>
<thead>
<tr>
<th>Revision Date</th>
<th>Revision Summary</th>
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</thead>
<tbody>
<tr>
<td>10/21/2016</td>
<td>New Policy effective 1/1/17 incorporating previous policies for Nexium (DRU 039), AcipHex (DRU 101), and Dexilant (DRU 174).</td>
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