



Proton pump inhibitors (PPIs) are a class of very effective and generally safe medicines used to treat heartburn, gastric ulcers, and gastroesophageal reflux disease (GERD). GERD is a condition that makes you prone to acid reflux and, over time, can cause damage to your esophagus.

To help you and your doctor choose the right PPI if you need one, *Consumer Reports Best Buy Drugs* has evaluated the drugs in this category based on their effectiveness, safety, and cost. This 2-page brief is a summary of a 16-page report you can access on the Internet at ConsumerReportsHealth.org/BestBuyDrugs.

DO YOU NEED A PPI?

Not everyone who experiences heartburn needs a PPI. Several of the PPIs have been widely advertised to consumers and heavily promoted to physicians, and this has led to overuse of the drugs in the treatment of "garden variety" heartburn. If you suffer from only occasional heartburn and have not been diagnosed with GERD, nonprescription antacids such as Maalox, Mylanta, Rolaids, and Tums, or acid-reducing drugs known as H2 blockers, such as cimetidine (Tagamet), famotidine (Pepcid), nizatidine (Axid), and ranitidine (Zantac), will very likely provide relief.

Talk with your doctor about the role that dietary and lifestyle changes can play in alleviating heartburn, too — such as eating smaller meals and not lying down for at least 3 hours after eating, losing weight if you need to, and avoiding alcohol.

If, however, you experience heartburn twice a week or more for weeks or months on end, have frequent regurgitation of food into your throat or mouth (with or without heartburn), or if your heartburn is not relieved by the drugs mentioned above, you should see your doctor. You may have GERD and may need a PPI.

Our Recommendations

You should see a doctor if you have heartburn twice a week or more and your symptoms are not controlled by lifestyle changes or over-the-counter antacids or H2 blockers. You may have GERD that could be helped by taking a PPI.

The seven available PPI medicines are roughly equal in effectiveness and safety but differ in cost. Three — omeprazole (Prilosec, Prilosec OTC), lansoprazole (Prevacid, Prevacid 24HR), and omeprazole/sodium bicarbonate (Zegerid, Zegerid OTC) — are available as both a prescription and a nonprescription drug.

Taking the evidence for effectiveness, safety, cost, and other factors into account, Prilosec OTC, generic omeprazole OTC, and Prevacid 24HR are our choices as *Consumer Reports Health Best Buy Drugs* if you need a PPI. You could save \$200 a month or more by choosing these medicines over more expensive prescription PPIs. If you have health insurance, talk to your doctor about taking the PPI with the lowest out-of-pocket cost to you.

Safety note: PPIs may increase the risk of pneumonia, infection with a bacterium called *Clostridium difficile*, and hip fractures. Talk with your doctor about these risks, especially if you must take a PPI over a long period of time. In addition, anyone taking clopidogrel (Plavix), a blood thinner used to prevent clots, should know that some studies indicate that PPIs reduce clopidogrel's effectiveness, which could increase the risk of another heart attack. Our medical advisers recommend that people taking clopidogrel not take PPIs unless other remedies have not helped.

This information was updated in May 2010.

Comparing Effectiveness of the PPIs¹

Generic Name And Dose Per Day	Brand Name	Symptom Relief at 4 Weeks, Average Percent of Patients (Range)	Esophageal Healing at 8 Weeks, Average Percent of Patients (Range)	Relapse Prevention
Esomeprazole 20 mg	Nexium	NA ²	87% (84% - 91%)	87%
Esomeprazole 40 mg	Nexium	73% (65% - 82%)	90% (88% - 92%)	93%
Lansoprazole 30 mg	Prevacid	70% (61% - 80%)	86% (83% - 90%)	91%
Omeprazole 20 mg	Prilosec	65% (54% - 76%)	85% (81% - 88%)	86% - 92%
Pantoprazole 20 mg	Protonix	77% (70% - 84%)	77% (65% - 88%)	55% - 86%
Pantoprazole 40 mg	Protonix	72% (62% - 83%)	89% (86% - 92%)	78%
Rabeprazole 20 mg	Aciphex	69% (52% - 86%)	82% (76% - 89%)	89%

1. Effectiveness data presented for PPI dosage strengths that have been studied to date. Data from individual studies. Ranges given reflect multiple studies.

2. NA=Data not available.

PPI Cost Comparison

Generic Name	Brand Name ¹	Frequency of Use ²	Average Monthly Cost ³
Esomeprazole 20 mg capsules	Nexium	One per day	\$248
Esomeprazole 40 mg capsules	Nexium	One per day	\$239
Dexlansoprazole 30 mg sustained-release tablets	Kapidex	One per day	\$174
Dexlansoprazole 60 mg sustained-release tablets	Kapidex	One per day	\$170
 Lansoprazole 20 mg delayed-release tablets	Prevacid 24HR	One per day	\$23 ⁴
Lansoprazole 15 mg delayed-release capsules	Prevacid	One per day	\$267
Lansoprazole 15 mg delayed-release tablets	Prevacid	One per day	\$242
Lansoprazole 30 mg delayed-release capsules	Prevacid	One per day	\$253
Lansoprazole 30 mg delayed-release tablets	Prevacid	One per day	\$237
 Omeprazole 20 mg tablets (nonprescription)	Prilosec OTC	One per day	\$24 ⁴
 Omeprazole 20 mg tablets (nonprescription)	Generic	One per day	\$19 ⁴
Omeprazole 10 mg delayed-release capsules	Prilosec	One per day	\$192
Omeprazole 10 mg sustained-release capsules	Generic	One per day	\$110
Omeprazole 20 mg delayed-release capsules	Prilosec	One per day	\$220
Omeprazole 20 mg delayed-release capsules	Generic	One per day	\$69
Omeprazole 40 mg sustained-release capsules	Prilosec	One per day	\$378
Omeprazole 40 mg sustained-release capsules	Generic	One per day	\$172
Omeprazole/Sodium Bicarbonate 20 mg/1100 mg capsules	Zegerid OTC	One per day	\$21
Omeprazole/Sodium Bicarbonate 20 mg/1100 mg capsules	Zegerid	One per day	\$245
Omeprazole/Sodium Bicarbonate 40 mg/1100 mg capsules	Zegerid	One per day	\$249
Pantoprazole 20 mg delayed-release tablets	Protonix	One per day	\$199
Pantoprazole 20 mg delayed-release tablets	Generic	One per day	\$142
Pantoprazole 40 mg delayed-release tablets	Protonix	One per day	\$192
Pantoprazole 40 mg delayed-release tablets	Generic	One per day	\$137
Rabeprazole 20 mg tablets	Aciphex	One per day	\$274

1. "Generic" indicates drug sold by generic name. Among the PPIs, only omeprazole and pantoprazole are available as generic drugs.

2. As typically prescribed.

3. Monthly cost reflects nationwide retail average prices for March 2010, rounded to nearest dollar. Information derived by Consumer Reports Health Best Buy Drugs from data provided by Wolters Kluwer Health, Pharmaceutical Audit Suite ®. Wolters Kluwer Health is not involved in our analysis or recommendations. Average monthly cost is based on recommended dosage of one pill daily.

4. Average prices obtained by Consumer Reports from nearly 100 chain and independent pharmacies in locations across the U.S.

5. Newly available medication; average price obtained from an online pharmacy source.

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