



Our Recommendations

Proton pump inhibitors (PPIs) are a class of drugs used to treat heartburn, gastroesophageal reflux disease (GERD), and ulcers. Heartburn and GERD are quite common. Between a quarter and a third of adults in the U.S. will have GERD at some point in their lives. There are five medicines in this class. One is available as a relatively inexpensive nonprescription drug.

To help you and your doctor choose a PPI if you need one, *Consumer Reports* has evaluated the drugs in this category based on their effectiveness, safety and cost. This two-page brief is a summary of a 14-page report you can access on the Internet at www.CRBestBuyDrugs.org. You can also learn about other drugs we've analyzed on this *free* Web site. Our independent evaluations are based on scientific reviews conducted by the Oregon Health and Science University-based Drug Effectiveness Review Project. Grants from the Engelberg Foundation and National Library of Medicine help fund *Consumer Reports Best Buy Drugs*.

DO YOU NEED A PPI?

If you have heartburn only occasionally and have not been diagnosed with GERD, you probably do *not* need a PPI. Over-the-counter antacids and generic prescription drugs will very likely provide relief. See the Our Recommendations box on this page for mention of several such medicines. If you have chronic heartburn or get diagnosed with GERD, your doctor is highly likely to prescribe a PPI.

Not everyone with heartburn needs a PPI drug. 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, Roloids, and Tums, or acid-reducing drugs 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, weight loss, 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 may have GERD and need a PPI. GERD is a condition that makes you prone to acid reflux and can, over time, cause damage to your esophagus.

The five available PPI medicines are roughly equal in effectiveness and safety, but differ in cost. One – omeprazole (Prilosec OTC) – is available as both a prescription and nonprescription generic drug.

Taking the evidence for effectiveness, safety, cost, and other factors into account, **Prilosec OTC** is our choice as a *Consumer Reports Best Buy Drug* if you need a PPI. You could save \$100 to \$200 a month by choosing this medicine over more expensive prescription PPIs.

If you have health insurance, find out if your plan helps pay for Prilosec OTC. If not, talk to your doctor about taking the PPI with the lowest out-of-pocket cost to you.

Safety note: A few studies have linked PPIs to a higher risk of pneumonia and infection with a bacterium called *C. difficile*, and in December 2006 a study found that long-term use of PPIs may be associated with an increased risk of hip fractures. Talk with your doctor about these risks, especially if you must take a PPI over a long period of time. People aged 65 and over, and people with chronic medical conditions, who take a PPI should get vaccinated against pneumonia and get a flu shot every year.

This summary was last updated in January 2007.

Table 1. Comparative Effectiveness of PPIs¹

Generic Name And Dose Per Day	Brand Name	Complete Symptom Relief at 4 to 8 Weeks, Average Percent of Patients (Range)	Esophageal Healing at 8 Weeks, Average Percent of Patients (Range)	Relapse Prevention ²
Esomeprazole 20mg	Nexium	NA ³	87% (84%-91%)	87%
Esomeprazole 40mg	Nexium	73% (65%-82%)	90% (88%-92%)	93%
Lansoprazole 30mg	Prevacid	70% (61%-80%)	86% (83%-90%)	91%
Omeprazole 20mg	Prilosec	65% (54%-76%)	85% (81%-88%)	86%-92%
Pantoprazole 20mg	Protonix	77% (70%-84%)	77% (65%-88%)	55%-86%
Pantoprazole 40mg	Protonix	72% (62%-83%)	89% (86% to 92%)	78%
Rabeprazole 20mg	Aciphex	69% (52%-86%)	82% (76%-89%)	89%

1. Effectiveness data presented for PPI dosage strengths that have been studied to date.

2. Data from individual studies. Ranges given reflect multiple studies.

3. NA= Data Not Available

PPI Cost Comparison

Generic Name and Dose per Day	Brand Name ¹	Available as a Generic?	Average Monthly Cost ²
Esomeprazole 20mg tablets	Nexium	No	\$193
Esomeprazole 40mg tablets	Nexium	No	\$181
Lansoprazole 15mg delayed-release tablets	Prevacid	No	\$145
Lansoprazole 30mg delayed-release tablets	Prevacid	No	\$131
Lansoprazole 15mg delayed-release capsules	Prevacid	No	\$184
Lansoprazole 30mg delayed-release capsules	Prevacid	No	\$186
Omeprazole 20mg ³ tablets	Prilosec OTC ³	Yes	\$19-\$26 ³
Omeprazole 10mg sustained-release tablets	Prilosec	No	\$125
Omeprazole 20mg sustained-release tablets	Prilosec	No	\$153
Omeprazole 40mg sustained-release tablets	Prilosec	No	\$265
Omeprazole 10mg ⁴ sustained-release tablets	Generic	Yes	\$116 ⁴
Omeprazole 20mg ⁴ sustained-release tablets	Generic	Yes	\$89 ⁴
Omeprazole/sodium bicarbonate 20mg/1100mg	Zegerid	No	\$138
Omeprazole/sodium bicarbonate 40mg/1100mg	Zegerid	No	\$146
Omeprazole/sodium bicarbonate 20mg/1680mg	Zegerid	No	\$170
Omeprazole/sodium bicarbonate 40mg/1680mg	Zegerid	No	\$176
Pantoprazole 20mg delayed-release tablets	Protonix	No	\$159
Pantoprazole 40mg delayed-release tablets	Protonix	No	\$146
Rabeprazole 20mg tablets	Aciphex	No	\$189

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UNDERSTANDING GENERICS: A generic drug is a copy of a brand drug whose patent has expired. In this table, only omeprazole is available as a generic. It is also sold under its brand name, Prilosec. A non-prescription version, Prilosec OTC, is also available. The remaining PPIs are sold only as brand name drugs.

1. "Generic" indicates drug sold by generic name.
2. Monthly cost reflects nationwide retail average prices for September 2006 (except where noted), rounded to nearest dollar. Information derived by *Consumer Reports Best Buy Drugs* from data provided by Wolters Kluwer Health, Pharmaceutical Audit Suite.
3. This is a nonprescription (over-the-counter) version of omeprazole available at any drug store. The shelf price of this medicine varies widely. It may be least expensive at large discount stores and at Internet pharmacies. The cost for a month's supply given in this table (\$19-\$26) is based on a spot check of prices at Internet online pharmacies on October 30, 2006.
4. Generic omeprazole is generally available at a lower price at large discount stores. In some cases the price may be half of that reflected in this table, which presents nationwide average prices.