

Antiplatelet drugs are used to lower the risk of heart attacks and strokes and to treat people who have artery blockages in their legs. They work by reducing the formation of blood clots, which can lead to heart attacks and strokes.

To help you and your doctor choose an antiplatelet medicine if you need one, *Consumer Reports* has evaluated the drugs in this category based on their effectiveness, safety, and cost. This 2-page brief is a summary of a 17-page report you can access on the Internet at ConsumerReportsHealth.org/BestBuyDrugs. You can also learn about other drugs we've analyzed on this free Web site. *Consumer Reports Best Buy Drugs* should not be viewed as a substitute for a consultation with a medical or health professional. This report and the information on our website are provided to enhance — not to replace — your communication with your doctor.

DO YOU NEED AN ANTIPLATELET?

If you have high blood pressure, high cholesterol, or diabetes, or you smoke, are overweight, or have a family history of early heart disease, you may already be taking medicines to lower your risk of heart disease and stroke. Your doctor is likely to advise that you take an antiplatelet drug, too, such as aspirin, unless you have a history of internal bleeding, such as an ulcer. Likewise, if you have been diagnosed with heart disease, have had a heart attack or stroke, or have had blood clots in your legs, you are a candidate for treatment with an antiplatelet.

Our independent evaluations are based on scientific reviews conducted by the Oregon Health and Science University-based Drug Effectiveness Review Project. These materials were made possible by a grant from the state Attorney General Consumer and Prescriber Education Grant Program, which is funded by the multi-state settlement of consumer fraud claims regarding the marketing of the prescription drug Neurontin (gabapentin).

Our Recommendations

The antiplatelet drugs are among the most widely used in the world. They are used to lower the risk of heart attack and stroke under a variety of circumstances. They are highly effective in doing so.

The antiplatelet drugs work by decreasing blood clotting, which evidence now shows is directly linked to heart attack and stroke risk. In people whose arteries have narrowed from atherosclerosis — the “hardening of the arteries” that is the basis of coronary artery disease and peripheral artery disease (in the legs and neck, for example) — blood clumping and clotting can become dangerous.

Taking the evidence for effectiveness, safety, side effects, and cost into account, we have chosen the following as *Consumer Reports Best Buy Drugs* for people in the following clinical circumstances:

- **Aspirin plus clopidogrel (Plavix)** — If you've been diagnosed with acute coronary syndrome (e.g. unstable angina) or have had a heart attack or stent implanted.
- **Clopidogrel (Plavix)** — If you can't take aspirin and have been diagnosed with acute coronary syndrome or had a stent implanted.
- **Aspirin, aspirin plus extended-release dipyridamole (Aggrenox), or clopidogrel (Plavix)** — If you've had a stroke or ministroke (TIA).
- **Aspirin** — If you have peripheral vascular disease.

Be sure to ask your doctor about generic clopidogrel, which should become available in the spring of 2012.

This report was published in September 2011.

Summary of Evidence on Antiplatelet Drugs

Brand Name(s)	Generic Name	Effective in Preventing Heart Attack or Death in People with Acute Coronary Syndrome?	Effective in Preventing Second Stroke in People Who have had a Stroke?	Effective in Preventing Death in People with Peripheral Vascular Disease?	Increased Risk of Internal Bleeding When Taken with Aspirin?
Bayer, Bufferin, Others	Aspirin	Yes	Yes	Yes	N/A
Aspirin plus Plavix	Aspirin plus clopidogrel	Yes	No evidence	Probably	Yes
Aggrenox	Aspirin/extended-release dipyridamole	No evidence	Yes	No evidence	Yes
Plavix	Clopidogrel	Yes	Probably	Probably	Yes

N/A = not applicable; aspirin by itself increases risk of internal bleeding.

Your Treatment Choices with Antiplatelets

Condition/Your Health Status	Best Treatment ¹	Best Treatment if You Can't Take Aspirin ²	Less Effective, Less Safe, or No Evidence For	Comments or Cautions
Have Acute Coronary Syndrome (also called unstable angina or had a heart attack) ³	Aspirin + clopidogrel (Plavix)	Clopidogrel (Plavix)	Prasugrel (Effient), Ticlopidine, Aggrenox	Aspirin + clopidogrel shouldn't be taken by people at higher risk of stomach bleeding or ulcers
Had a Stent Implanted	Aspirin + clopidogrel (Plavix) ⁴	Clopidogrel (Plavix)	Prasugrel (Effient), Ticlopidine, Aggrenox	Strong evidence for benefit of the combination of drugs. Prasugrel is similar to clopidogrel for reducing all-cause and cardiovascular death with a slightly higher risk of bleeding.
Have Had a Stroke or Transient Ischemic Attack (TIA)	Aggrenox or Clopidogrel (Plavix) or aspirin	Clopidogrel ⁵	Prasugrel (Effient), Ticlopidine	Aspirin alone has been found less effective than Aggrenox and clopidogrel is similar to Aggrenox.
Peripheral Vascular Disease ⁶	Aspirin	Clopidogrel (Plavix)	Prasugrel (Effient), Ticlopidine, Aggrenox	Evidence suggests aspirin and clopidogrel are similar.

1. "Best Treatment" indicates best initial treatment for the majority of patients. Individual circumstances vary, however, and your doctor may advise another treatment course for good clinical reasons.

2. Some people are allergic to aspirin, or are particularly sensitive to its adverse effects on their stomachs, with a resultant higher risk of stomach bleeding and ulcers.

3. Acute coronary syndrome indicates a heart attack might be imminent.

4. Except for people who are at higher risk of internal bleeding, for example from stomach ulcers. The combination in some people adds to that risk. It can also add to the risk of bleeding in the brain, which can trigger a kind of stroke called a hemorrhagic stroke.

5. Not strong evidence for clopidogrel in preventing secondary strokes; aspirin second best choice if you can take it.

6. Peripheral vascular disease mostly involves blood clots and vein blockages in the legs. This can occur in one or both legs.

Costs of Antiplatelet Drugs

Generic Name and Dose	Brand Name ^A	Frequency of Use Per Day ^B	Average Monthly Cost ^C
 Aspirin tablet 81 mg-325 mg	Bayer, Bufferin, Others, and Generic	One	\$1 ^E
 Aspirin/dipyridamole sustained release capsule 25 mg/200 mg	Aggrenox	Two	\$247
 Clopidogrel tablet 75 mg ^D	Plavix	One	\$214
Prasugrel tablet 10 mg	Effient	One	\$222
Prasugrel tablet 5 mg	Effient	One	\$231
Ticlopidine tablet 250 mg	Generic	Two	\$64

A. "Generic" indicates that this drug is sold as a generic.

B. Frequency of use reflects usual frequency; some products may be used more or less frequently.

C. Prices reflect nationwide retail average for April 2011, rounded to the nearest dollar; prices are derived by *Consumer Reports Best Buy Drugs* from data provided by Wolters Kluwer Pharma Solutions, which is not involved in our analysis or recommendations.

D. Generic clopidogrel is expected to become available the spring of 2012.

E. Average aspirin prices were calculated by *Consumer Reports Best Buy Drugs* using prices obtained from seven online drugstore retailers: Costco.com, CVS.com, Drugstore.com, FamilyMeds.com, Healthwarehouse.com, Kroger.com, and Target.com.