ConsumerReports BEST BUY DRUGS

Evaluating Prescription Drugs Used to Treat

Fibromyalgia

COMPARING EFFECTIVENESS, SAFETY, AND PRICE



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Our recommendations

The symptoms of fibromyalgia include widespread pain and tenderness along with other problems, including depression, difficulty sleeping, fatigue, and irritability. The symptoms can interfere with a person's life both at work and at home.

Because there is not a single, specific cause of fibromyalgia and the symptoms can vary from patient to patient, choosing an effective treatment can be challenging. Experts say the best, overall strategy includes both medications and nondrug therapies, such as exercise, counseling, and stress relief.

The medications used to treat fibromyalgia include certain antidepressants (amitriptyline, nortriptyline, fluoxetine, paroxetine, duloxetine, milnacipran), a few anti-seizure medications (gabapentin, pregabalin), and a muscle relaxant (cyclobenzaprine). However, studies show that the benefits of these medications are generally small. There is no clear evidence that one drug is better than another, and all of them likely lose their benefit over time.

Each drug differs in the risks they pose to you. All antidepressants should be used with caution in those with a history of suicide attempt or who are at risk of suicide especially in people under the age of 25. Amitriptyline, cyclobenzaprine, gabapentin, and pregabalin all cause increased sedation and should be used with caution in the elderly.

The medications differ substantially in price, so cost might be an important factor in which one you choose. The monthly cost for these drugs ranges from as little as \$6 to more than \$500.

Taking into account the evidence on their effectiveness and safety as well as their price, we have chosen three *Consumer Reports Best Buy Drugs* as initial options to consider if you and your doctor have decided a medication is appropriate for your fibromyalgia symptoms:

- Generic amitriptyline
- Generic gabapentin
- Generic paroxetine-IR (immediate-release)

All of these medications have been on the market for 15 years or more and have been widely used. They are all available as inexpensive generics and are at least as effective and safe as the other fibromyalgia medications.

Although side effects of sedation, dry mouth, dizziness are common, serious side effects are rare.

The three drugs with FDA-approval for the treatment of fibromyalgia—pregabalin, duloxetine, and milnacipran—did not meet our *Best Buy* criteria because they are all more expensive than our *Best Buys* but have not been shown to be clearly more effective or safer.

This report was published in March 2014.

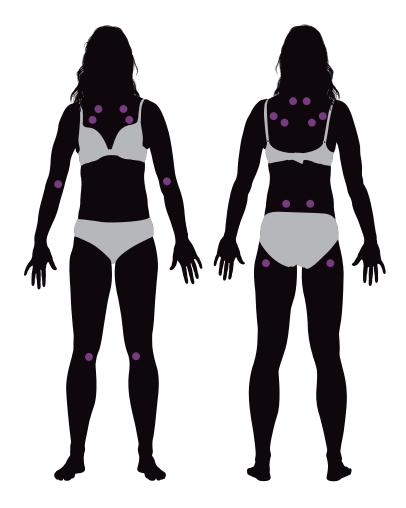
Welcome

The symptoms of fibromyalgia include pain and tenderness throughout the body that is often associated with other conditions that reduce a person's ability to function and affects their quality of life. People with fibromyalgia often have difficulty sleeping, feel tired during the day, and experience irritability and depression, all of which can affect their life both at work and at home.

Between 1 to 5 percent of adults in the U.S. have fibromyalgia, with women much more likely to develop it than men—about 80 to 90 percent of fibromyalgia sufferers are women. It can strike children and teens, but it's more common in older adults, with most cases occurring between the ages of 40 and 70.

According to criteria established by the American College of Rheumatology, a person is considered to have fibromyalgia if they have unexplained, widespread pain as well as other symptoms such as fatigue, feeling unrefreshed after waking, and thought and memory problems for at least 3 months. As you can see in the diagram to the right, there are nine paired points on the body where fibromyalgia tenderness usually occurs: the neck, shoulders, chest, arms, lower back, and legs.

The cause of fibromyalgia is not known. So far, scientists have not found one specific cause, and some experts think the condition is probably due to many different factors. One possibility is that people with fibromyalgia appear to have a problem with their nervous system. The nerves that carry messages of pain continue to fire even when there is no injury or trauma, which makes them feel pain at times when



THE NINE PAIRED TENDER POINTS, ACCORDING TO THE AMERICAN COLLEGE OF RHEUMATOLOGY CRITERIA FOR FIBROMYALGIA.

other people would not—for example, when they are touched or hugged. It's unclear whether the other symptoms—sleep problems, depression, anxiety, and stress—play a role in the cause of fibromyalgia, but they all may be part of the overall condition.

Because there is not one specific cause of fibromyalgia and the symptoms can vary from person to person, choosing an effective treatment can be challenging. Experts suggest that the best strategy includes both medications and nondrug therapies, such as exercise, counseling, and stress relief. We don't evaluate the nondrug strategies in this report.

Welcome

Table 1. Medications Evaluated in this Report				
Generic Name	Brand Name	Available as a generic?	Approved to treat fibromyalgia?	
Antidepressants				
Amitriptyline	Generic only	Yes	No	
Nortriptyline	Aventyl, Pamelor	Yes	No	
Citalopram	Celexa	Yes	No	
Fluoxetine	Prozac, Prozac Weekly	Yes	No	
Paroxetine	Paxil, Paxil CR, Pexeva	Yes	No	
Duloxetine	Cymbalta	Yes	Yes	
Milnacipran	Savella	No	Yes	
Antiepileptics				
Gabapentin	Neurontin	Yes	No	
Pregabalin	Lyrica	No	Yes	
Muscle relaxants				
Cyclobenzaprine	Amrix, Flexeril	Yes	No	

Instead, this report focuses on 10 of the most commonly used medications to treat fibromyalgia. We review the evidence on how the medications compare to each other in their ability to relieve symptoms and the side effects they can cause. The report is based on a comprehensive expert analysis of the medical evidence available on medications used to treat fibromyalgia. There's more information on page 14 and at www.CRBestBuyDrugs.org about how we conducted our evaluation.

This report is part of a Consumer Reports project intended to help you find safe, effective medicines that give you the most value for your health-care dollar. Three of the drugs listed—duloxetine (Cymbalta), milnacipran (Savella), and pregabalin (Lyrica)—are approved by the FDA for the treatment of fibromyalgia.

While the other drugs are approved for treating conditions associated with fibromyalgia, including depression and pain, they are not specifically approved for fibromyalgia. All of the antidepressant medications studied are FDA-approved for treating depression with many also having FDA approval for treating pain. The antiepileptic gabapentin is also approved for treating nerve pain, while the muscle relaxant cyclobenzaprine is approved for treating muscular pain.

Although none of the 10 medications are approved for treating sleep disorders, some of them cause sedation and are often prescribed "off-label" to help with sleep. The term off-label means that the drug is prescribed to treat a condition other than what it was approved for by the FDA. Doctors can legally prescribe any

Welcome

medication they see fit to treat a person's condition. It is important to note that although only these three drugs are approved by the FDA specifically for fibromyalgia, the approval process is lengthy and expensive for manufacturing companies, so older drugs that are already approved for other uses may not be taken through this process.

In practice, often more than one medication is used to treat fibromyalgia, but there have been very few studies that evaluated the effectiveness of combination treatments. For this reason, this report focuses on the use of one medication at a time. You should know that the effectiveness of one drug may wane over time and when this occurs, it is common to switch to another medication. However, the person may later go back to the first medication and find it to be effective again.

There are other medications that have been used to treat the symptoms of fibromyalgia but they are not included in this report. Those additional medications are quite diverse in their treatment approach and include commonly used drugs such as nonsteroidal anti-inflammatory drugs, nausea medications, sedatives, and pain medications such as opioids, as well as less commonly used medications such as growth hormone and synthetic cannabinoids. Most of those have not been studied well enough in the treatment of fibromyalgia to make conclusions about their use.

In terms of cost, generic formulations of some of those medications can run as little as \$4 for a month's supply through generic drug programs run by major chain stores such as Kroger, Sam's Club, Target, and Walmart. For an even better bargain, you may be able to get a three-month supply for \$10. We note in the price chart starting on page 11 which generics are likely available through these programs. Some stores, such as CVS and Walgreens, may require a membership fee to participate and might charge higher prices. There might be other restrictions too, so check the details carefully to make sure your drug and dose are covered.

This report was published in March 2014.



How do these medications help relieve fibromyalgia symptoms?

Each of those types of medications works differently in the body to relieve symptoms. This section will help you understand how they work and how they compare in terms of effectiveness and safety. It is important to note that few studies directly compare one drug to another and most of the studies were small and short term (most lasting less 15 weeks or less), which limits the strength of the overall evidence.

ANTIDEPRESSANTS AND MUSCLE RELAXANTS

Antidepressants alter the level of chemicals in the brain called neurotransmitters. They are categorized based on their chemical structure and the neurotransmitters they affect—primarily serotonin and norepinephrine. Serotonin and norepinephrine appear to lessen the effects of the nerve fibers carrying messages of pain to the brain.

Some of these medications also cause sedation and seem to help a person sleep better. Improving both sleep and depressive symptoms seems to strongly affect a person's ability to concentrate, be less irritable, experience less pain, and feel better overall.

There are two serious but rare safety concerns you should be aware of if you take an antidepressant. Most of the antidepressants (as well as gabapentin) can increase the risk of suicidal thoughts and behaviors in children, teens and young adults, so they should be used cautiously in people who are at risk of suicide.

In addition, most of the antidepressants discussed in this report— citalopram, duloxetine, fluoxetine, milnacipran, and paroxetine—and some of the other drugs used to treat fibromyalgia (for example, Tramadol) can increase the levels of the brain chemical serotonin. If the level of serotonin becomes too high in the body, it can trigger a condition called "serotonin-syndrome," which is a medical emergency. It causes confusion, increased heart rate, shivering, sweating, high blood pressure, very

high fevers, and muscle twitching and tremors. If this happens, contact your doctor immediately.

Certain medications, including migraine medications and some sleep aids, increase the risk of serotonin-syndrome when taken with antidepressants, so make sure your health care provider is aware of any other medications you are taking. Neither suicide nor serotonin-syndrome was reported in the studies of fibromyalgia.

Tricyclic medications: amitriptyline, cyclobenzaprine, and nortriptyline

In general, people with fibromyalgia who take tricyclic medications experience a greater reduction in pain than those taking no medication.

Amitriptyline is the most well studied of the tricyclics, yet it is not clear exactly how many patients with fibromyalgia experienced meaningful pain relief from taking it. The best estimate is that one of every four patients benefit from it. On average, people with fibromyalgia who took amitriptyline reported that their pain improved by almost two points on a 10-point scale compared to those who took a placebo. Studies that have taken into account factors such as how fibromyalgia was diagnosed and the form of amitriptyline used (long-acting vs. short-acting, for example) have not found the same benefit, so our confidence in this result is low. There is not enough evidence to say how well amitriptyline compares to placebo on other outcomes, including fatigue and function.

The use of nortriptyline in fibromyalgia patients has been studied in a single trial, but the results were inconclusive, partially because a low dose of the drug was used.

Side effects of the tricyclic antidepressants include dizziness, dry mouth, gait disturbances, sedation, and

How do these medications help relieve fibromyalgia symptoms?

stomach upset. More serious side effects include heart arrhythmias and seizures, but those were not reported in patients taking these medications for fibromyalgia. In the low doses commonly used for fibromyalgia, side effects appear minimal and do not usually seem to cause people to stop using the medication.

Other antidepressants — duloxetine and milnacipran

Both duloxetine and milnacipran relieve pain. In studies, pain was reduced by half in 30 out of 100 people taking duloxetine or milnacipran, compared with 20 out of 100 people taking placebo. Duloxetine was superior to milnacipran in improving average pain score, symptoms of depression, sleep disturbances, and general quality of life in the short term—less than six months. But over time, the differences were negligible.

Side effects are common with both drugs and include constipation or diarrhea, dizziness, dry mouth, headache, increased sweating, and stomach upset. Both drugs have also been associated with increased liver enzymes. In clinical trials, milnacipran increased heart rate in some patients whereas duloxetine did not. Both drugs were similar in the rate of people who stopped taking the drug due to side effects.

Citalopram, fluoxetine, paroxetine

These medications are not well studied in patients with fibromyalgia but the available evidence indicates that immediate-release paroxetine may provide a small improvement in pain, sleep, and depression based on one trial comparing paroxetine to amitriptyline. We can't draw conclusions about the effectiveness of fluoxetine and citalopram for treating fibromyalgia symptoms due to the small sizes of the available studies (51 people or less) and the quality of the study designs.

The common side effects of these medications include drowsiness, dry mouth, and sexual dysfunction.

Although a small number of patients in clinical trials stopped their medication because of these side effects, these drugs are generally well tolerated.

ANTISEIZURE MEDICATIONS — GABAPENTIN AND PREGABALIN

Gabapentin and pregabalin are classified as antiseizure medications, but they are also used to help relieve pain in people with fibromyalgia. Both medications alter the brain chemistry. Pregabalin decreases levels of certain chemicals in the brain called neurotransmitters that build up because of the constant firing of the nerves both in the spinal cord and the brain. It also increases other neurotransmitters that help suppress the constant firing of the nerves, which helps relieve pain. It's unclear which neurotransmitters are affected by gabapentin or pregabalin.

Both drugs improve pain, sleep, fatigue, and the quality of life in people with fibromyalgia to about the same degree as amitriptyline. In clinical trials, 70 percent of people with fibromyalgia who took gabapentin for 12 weeks said they felt better compared with 40 percent of those who took a placebo. In addition, 51 percent of those who took gabapentin experienced a reduction of one-third in their pain compared with those who took a placebo.

In another trial, between 40 and 80 percent of people who took pregabalin said their pain was reduced by nearly a third, compared with 28 to 38 percent of those who took a placebo. For doses of 300 mg to 600 mg per day of pregabalin, 20 to 24 percent of patients said their pain was reduced by half compared with 12 percent of patients taking placebo.

One of the most common side effects of pregabalin and gabapentin is sedation. This is why they are often given at higher doses at night, which seems to help with sleep. Other side effects include confusion, blurred vision, dizziness, liver and kidney impairment,

How do these medications help relieve fibromyalgia symptoms?

and problems with concentration. In particular, they should be used with caution in elderly people due to side effects of confusion, dizziness, and sedation. Both drugs can also cause swelling, so people with heart failure should not take them. Gabapentin has been shown to increase the risk of suicide in depressed people and should be avoided in those at increased risk of suicide attempt.

Table 2 summarizes the drugs that provide an overall improvement in fibromyalgia based on measures of many symptoms including function, pain level, fatigue, sleep disturbance, and psychological distress.

Table 2. Drugs Providing Generalized Relief of Fibromyalgia Symptoms		
Drug Name	May provide relief for:	
Amitriptyline	Pain, sleep, fatigue, depression	
Paroxetine - IR	Pain, sleep, depression	
Duloxetine	Pain, sleep, depression	
Milnacipran	Pain, fatigue, depression	
Gabapentin	Pain, sleep	
Pregabalin	Pain, fatigue, sleep	



How do the drugs compare?

Effectiveness

Studies show that most of these medications reduce pain to a similar degree. Although some studies suggest certain drugs are more effective than others for a given symptom, there is no clear evidence overall that one drug is better than another. All likely lose their benefit with time.

Few studies have compared one drug directly to another. Duloxetine and pregabalin have been shown to be superior to milnacipran in improving sleep problems and quality of life, while duloxetine and milnacipran have been shown to be superior to pregabalin in the treatment of depression.

There are no significant differences in overall improvement in pain symptoms between these drugs. A meta-analysis of all the available data found that none of the medications was clearly superior.

Safety

There are no differences between the drugs in the percentage of people who stop taking them for any reason or in the percentage who stop taking them specifically due to adverse events. Serious side effects are rare, although all of the antidepressants and gabapentin have the potential to increase the risk of a suicide attempt and many of the medications also pose a risk of serotonin-syndrome. See **Table 3** for the most common side effects and rare but serious side effects associated with these medications.

Close monitoring is necessary to avoid side effects and interactions with other medications, and no medication should be stopped abruptly. Also, avoid alcohol or other sedating drugs while taking any of these medications.

All the medications should be used at the lowest possible dose that provides improvement in your fibromyalgia symptoms.

Table 3. Side Effects of the Fibromyalgia Drugs				
Name	Common Side Effects	Serious Rare Side Effects		
Amitriptyline	Blurred vision, constipation, dizziness, dry mouth, gait disturbances, sedation	Increased risk of suicide, especially in those under 25 years of age, heart arrhythmias, lowering of blood counts		
Paroxetine	Drowsiness, dry mouth, sexual dysfunction	Increased risk of suicide, especially in those under 25 years of age, serotonin-syndrome		
Duloxetine/Milnacipran	Constipation or diarrhea, dizziness, dry mouth, headache, stomach upset, sweating	Increased risk of suicide, especially in those under 25 years of age, serotonin-syndrome Milnacipran: rapid heart beat		
Gabapentin/Pregabalin	Blurred vision, confusion, dizziness, liver and kidney function impairment, problems with concentration, swelling	Pregabalin: Heart failure		

Choosing a medication to treat fibromyalgia – Our *Best Buy* picks:

Antidepressants, antiseizure medications, and muscle relaxants can play a role in the treatment of fibromyalgia, but the benefits are generally small. There is no clear evidence that one drug is better than another, and all of them likely lose their benefit with time. Although we did not evaluate other fibromyalgia treatments like exercise, counseling or stress-relief, incorporating those into any treatment program is a recommended approach by our medical experts.

In terms of the medications, side effects are also important to consider. While none of the drugs are clearly safer than the others, each drug differs in the risks they pose to you (as we have described in **Table 3**).

The medications differ substantially in price, so cost might be an important factor in which one you choose. As you can see from **Table 4**, some generic prescription versions cost as little as \$6 for a month's supply, while more expensive brand names can run \$500 or more monthly. Since none of the medications have been shown to be clearly more effective than the others, it makes sense to start with the least expensive option, if you have decided a medication is worth a try.

Taking into account the evidence on their effectiveness and safety as well as their price, we have chosen three *Consumer Reports Best Buy Drugs* as initial options to consider if you and your doctor have decided a medication is appropriate for your fibromyalgia symptoms:

- Generic amitriptyline
- Generic gabapentin
- Generic paroxetine-IR (immediate-release)

All of these medications have been on the market for 15 years or more and have been widely used by doctors. They are all available as inexpensive generics (compared

to the costs of brand-name drugs) and are at least as effective and safe as the other fibromyalgia medications.

Although side effects of dizziness, dry mouth, and sedation are common, serious side effects are rare and the percentage of people who stop using these medications due to adverse effects are similar to placebo.

The three drugs with FDA-approval for the treatment of fibromyalgia—pregabalin, duloxetine, and milnacipran—did not meet our *Best Buy* criteria because they are all more expensive than our *Best Buys* but have not been shown to be clearly more effective or safer.



Choosing a medication to treat fibromyalgia – Our *Best Buy* picks:

Table 4. Costs of Fibromyalgia Medications

Note: If the price box contains a **S**, that indicates the dose of that drug is likely available for a low monthly cost through programs offered by large chain stores. For example, Kroger, Sam's Club, Target, and Walmart offer a month's supply of selected generic drugs for \$4 or a three-month supply for \$10. Other chain stores, such as Costco, CVS, Kmart, and Walgreens, offer similar programs. Some programs have restrictions or membership fees, so check the details carefully for restrictions and to make sure your drug is covered.

	Generic Name and Dose	Brand Name ¹	Frequency of Dose ² (# pills per day)	Average Monthly Cost ³	
	Amitriptyline and Nortriptyline – average daily	dose 25 - 50 i	ng		
BEST BUY	Amitriptyline 25 mg tablet	Generic	One	\$6 \$	
BEST BUY	Amitriptyline 50 mg tablet	Generic	One	\$7 \$	
	Nortriptyline 25 mg capsule	Generic	One	\$8 \$	
	Nortriptyline 50 mg capsule	Generic	One	\$16 \$	
	Citalopram - average daily dose 20 - 40 mg				
	Citalopram 20 mg tablet	Celexa	One	\$209	
	Citalopram 20 mg tablet	Generic	One	\$31 \$	
	Citalopram 40 mg tablet	Celexa	One	\$211	
	Citalopram 40 mg tablet	Generic	One	\$37 \$	
	Cyclobenzaprine – average daily dose 20 – 30	mg			
	Cyclobenzaprine 10 mg tablet	Flexeril	Two - Three	\$139 - \$208	
	Cyclobenzaprine 10 mg tablet	Generic	Two - Three	\$20 - \$31 \$	
	Duloxetine - average daily dose 30 - 60 mg	Duloxetine – average daily dose 30 – 60 mg			
	Duloxetine 30 mg capsule	Cymbalta	One	\$269	
	Duloxetine 30 mg capsule	Generic	One	\$192	
	Duloxetine 60 mg capsule	Cymbalta	One	\$270	
	Duloxetine 60 mg capsule	Generic	One	\$192	
	Fluoxetine - average daily dose 20 - 40 mg				
	Fluoxetine 20 mg capsule	Prozac	One	\$260	
	Fluoxetine 20 mg capsule	Generic	One	\$38 \$	
	Fluoxetine 20 mg tablet	Sarafem	One	\$319	
	Fluoxetine 20 mg tablet	Generic	One	\$30	
	Fluoxetine 40 mg capsule	Prozac	One	\$528	
	Fluoxetine 40 mg capsule	Generic	One	\$105 \$	

Choosing a medication to treat fibromyalgia – Our *Best Buy* picks:

Table 4. Costs of Fibromyalgia Medications (continued)

Note: If the price box contains a **S**, that indicates the dose of that drug is likely available for a low monthly cost through programs offered by large chain stores. For example, Kroger, Sam's Club, Target, and Walmart offer a month's supply of selected generic drugs for \$4 or a three-month supply for \$10. Other chain stores, such as Costco, CVS, Kmart, and Walgreens, offer similar programs. Some programs have restrictions or membership fees, so check the details carefully for restrictions and to make sure your drug is covered.

	Generic Name and Dose	Brand Name ¹	Frequency of Dose ² (# pills per day)	Average Monthly Cost ³	
	Gabapentin - average daily dose 1200 - 1800 mg				
	Gabapentin 400 mg capsule	Neurontin	Three	\$354	
BEST BUY	Gabapentin 400 mg capsule	Generic	Three	\$83 \$	
	Gabapentin 600 mg tablet	Neurontin	Three	\$514	
BEST BUY	Gabapentin 600 mg tablet	Generic	Three	\$105	
Milnacipran - average daily dose 100 - 200 mg					
	Milnacipran 50 mg tablet	Savella	Two	\$208	
	Milnacipran 100 mg tablet	Savella	Two	\$203	
	Paroxetine CR - average daily dose 37.5 mg				
	Paroxetine CR 37.5 mg tablet	Paxil CR	One	\$184	
	Paroxetine CR 37.5 mg tablet	Generic	One	\$106	
	Paroxetine IR - average daily dose 20 - 40 mg	Ş			
	Paroxetine IR 20 mg tablet	Paxil	One	\$167	
	Paroxetine IR 20 mg tablet	Pexeva	One	\$247	
BEST BUY	Paroxetine IR 20 mg tablet	Generic	One	\$25 💲	
	Paroxetine IR 40 mg tablet	Paxil	One	\$183	
	Paroxetine IR 40 mg tablet	Pexeva	One	\$295	
BEST BUY	Paroxetine IR 40 mg tablet	Generic	One	\$35 \$	
	Pregabalin - average daily dose 300 - 450 mg	{			
	Pregabalin 150 mg capsule	Lyrica	Two	\$261	
	Pregabalin 200 mg capsule	Lyrica	Two	\$293	
	Pregabalin 225 mg capsule	Lyrica	Two	\$296	

- 1. "Generic" indicates a drug sold by generic name.
- 2. For drugs approved to treat fibromyalgia, doses are based on FDA-approved labeling. For the other drugs, doses are based on clinical trials and/or conventional doses for other conditions, such as chronic pain (not necessarily fibromyalgia).
- 3. Prices reflect nationwide retail average for January 2014, rounded to nearest dollar. Information derived by *Consumer Reports Best Buy Drugs* from data provided by Symphony Health Solutions, which is not involved in our analysis or recommendations.

5 Tips to talking with your doctor

It's important for you to know that the information we present here is not meant to substitute for a doctor's judgment. But we hope it will help you and your doctor arrive at a decision about which medication and dose is best for you, if one is warranted at all, and which gives you the most value for your health-care dollar.

Mention cost to your doctor.

Bear in mind that many people are reluctant to discuss the cost of medicines with their doctor, and that studies have found that doctors do not routinely take price into account when prescribing medicines. Unless you bring it up, your doctor may assume that cost is not a factor for you.

Ask about older medications.

Many people (including physicians) think that newer drugs are better. While that's a natural assumption to make, it's not always true. Studies consistently find that many older medicines are as good as, and in some cases better than, newer medicines. Think of them as "tried and true," particularly when it comes to their safety record. Newer drugs have not yet met the test of time, and unexpected problems can and do crop up once they hit the market. Of course, some newer prescription drugs are indeed more effective and safer. Talk with your doctor about newer vs. older medicines, including generic drugs.

Consider generic drugs.

Prescription medicines go "generic" when a company's patents on them have lapsed, usually after about 12 to 15 years. At that point, other companies can make and sell the drugs. Generics are much less

expensive than newer brand-name medicines, but they are not lesser quality drugs. Indeed, most generics remain useful medicines even many years after first being marketed. That is why more than 75 percent of all prescriptions in the U.S. today are written for generics.

Keep up-to-date records.Another important issue to talk with your doctor about is keeping a record of the drugs you take. There are several reasons for this:

- First, if you see several doctors, each may not be aware of medicines the others have prescribed.
- Second, since people differ in their response to medications, it's common for doctors today to prescribe several medicines before finding one that works well or best.
- Third, many people take several prescription medications, nonprescription drugs, and dietary supplements at the same time. They can interact in ways that can either reduce the benefit you get from the drug or be dangerous.
- Fourth, the names of prescription drugs—both generic and brand—are often hard to pronounce and remember.

For all these reasons, it's important to keep a written list of all the drugs and supplements you take and periodically review it with your doctors.

Know the facts.
Finally, always be sure that you understand the dose of the medicine being prescribed and how many pills you are expected to take each day. Your doctor should tell you this information. When you fill a prescription at a pharmacy, or if you get it by mail, check to see that the dose and the number of pills per day on the bottle match the amounts your doctor told you.

How we picked the Best Buy drugs

Our evaluation is primarily based on an independent scientific review of the evidence on the effectiveness, safety and adverse effects of the drugs included in this report. A team of physicians and researchers at Oregon Health & Science University Evidence-based Practice Center conducted the analysis as part of the Drug Effectiveness Review Project, or DERP. DERP is a first-of-its-kind multi-state initiative to evaluate the comparative effectiveness and safety of hundreds of prescription drugs.



A synopsis of DERP's analysis of the drugs to treat fibromyalgia forms the basis of this report. A consultant to *Consumer Reports Best Buy Drugs* is also a member of the Oregon-based research team, which has no financial interest in any pharmaceutical company or product.

The full DERP review of the drugs to treat fibromyalgia is available at http://derp.ohsu.edu/about/final-document-display.cfm. (This is a long and technical document written for physicians).

The monthly drug costs we cite were obtained from a healthcare information company that tracks the retail sales of prescription drugs in the U.S. Prices for a drug can vary quite widely, even within a single city or town. All the prices in this report are national averages based on sales of prescription drugs in retail outlets. They reflect the cash price paid for a month's supply of each drug in January 2014 provided by Symphony Health Solutions, which is not involved in our analysis or recommendations.

Consumer Reports Best Buy Drugs selected the Best Buy Drugs using the following criteria. The drug had to:

- Be as effective as or more effective than other medicines used to treat fibromyalgia.
- Have a safety record equal to or better than other medicines used to treat fibromyalgia.
- Have an average price for a 30-day supply that was substantially lower than the most costly medication meeting the first two criteria.

The Consumer Reports Best Buy Drugs methodology is described in more detail in the Methods section at www.CRBestBuyDrugs.org.

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About us

Consumer Reports is an independent and nonprofit organization whose mission since 1936 has been to provide consumers with unbiased information on goods and services and to create a fair marketplace. Its website is www.ConsumerReports.org.

Consumer Reports Best Buy Drugs is a publiceducation project administered by Consumers Union. These materials were made possible by the state Attorney General Consumer and Prescriber Education Grant Program, which is funded by a multistate settlement of consumer-fraud claims regarding the marketing of the prescription drug Neurontin.

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We followed a rigorous editorial process to ensure that the information in this report and on the *Consumer Reports Best Buy Drugs* website is accurate and describes generally accepted clinical practices. If we find an error or are alerted to one, we will correct it as quickly as possible. But Consumer Reports and its authors, editors, publishers, licensers, and suppliers cannot be responsible for medical errors or omissions, or any consequences from the use of the information on this site. Please refer to our user agreement at www.CRBestBuyDrugs.org for further information.

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References

- Arnold LM, Russell IJ, Diri EW, et al. A 14-week, randomized, double-blinded, placebo-controlled monotherapy trial of pregabalin in patients with fibromyalgia. Journal of Pain. Sep 2008;9(9):792-805.
- Arnold L, Gendreau R, Palmer R, Gendreau J, Wang Y. Efficacy and safety of milnacipran 100 mg/day in patients with fibromyalgia: results of a randomized, double-blind, placebocontrolled trial. . Arthritis Rheum. 2010;62(9):2745-2756.
- Arnold LM, Lu Y, Crofford LJ, et al. A double-blind, multicenter trial comparing duloxetine with placebo in the treatment of fibromyalgia patients with or without major depressive disorder. Arthritis Rheum. Sep 2004;50(9):2974-2984.
- Arnold LM, Rosen A, Pritchett YL, et al. A randomized, doubleblind, placebo-controlled trial of duloxetine in the treatment of women with fibromyalgia with or without major depressive disorder. Pain. Dec 15 2005;119(1-3):5-15.
- Ataoglu S, Ataoglu A, Erdogan F, Sarac J. Comparison of paroxetine, amitriptyline in the treatment of fibromyalgia. Turk J Med Sci. 1997;27:535-539. 6. Branco JC, Zachrisson O, Perrot S, Mainguy Y, Multinational Coordinator Study G. A European multicenter randomized double-blind placebo-controlled monotherapy clinical trial of milnacipran in treatment of fibromyalgia. J Rheumatol. Apr 2010;37(4):851-859.
- Carette S, Oakson G, Guimont C, Steriade M. Sleep electroencephalography and the clinical response to amitriptyline in patients with fibromyalgia. Arthritis Rheum. Sep 1995;38(9):1211-1217.
- Carette S, McCain GA, Bell DA, Fam AG. Evaluation of amitriptyline in primary fibrositis. A double-blind, placebocontrolled study. Arthritis Rheum. May 1986;29(5):655-659.
- 9. Carette S, Bell MJ, Reynolds WJ, et al. Comparison of amitriptyline, cyclobenzaprine, and placebo in the treatment of fibromyalgia. A randomized, double-blind clinical trial. Arthritis Rheum. Jan 1994;37(1):32-40.
- Carette S, Bell MJ, Reynolds WJ, et al. Comparison of amitriptyline, cyclobenzaprine, and placebo in the treatment of fibromyalgia. A randomized, double-blind clinical trial. Arthritis Rheum. Jan 1994;37(1):32-40.
- Chappell AS, Bradley LA, Wiltse C, Detke MJ, D'Souza DN, Spaeth M. A six-month double blind placebo-controlled, randomized clinical trial of duloxetine for the treatment of fibromyalgia. international Journal of General Medicine. 2008;1:91-102.
- Clauw DJ, Mease P, Palmer RH, Gendreau RM, Wang Y. Milnacipran for the treatment of fibromyalgia in adults: a 15-week, multicenter, randomized, double-blind, placebocontrolled, multiple-dose clinical trial.[Erratum appears in Clin Ther. 2009 Jul;31(7):1617].[Erratum appears in Clin Ther. 2009 Feb;31(2):446]. Clin Ther. Nov 2008;30(11):1988-2004.

- Crofford LJ, Rowbotham MC, Mease PJ, et al. Pregabalin for the treatment of fibromyalgia syndrome: results of a randomized, double-blind, placebo-controlled trial. Arthritis Rheum. Apr 2005;52(4):1264-1273.
- 14. Gendreau RM, Thorn MD, Gendreau JF, et al. Efficacy of milnacipran in patients with fibromyalgia. J Rheumatol. Oct 2005;32(10):1975-1985.
- 15. Ginsberg F, Mancaux A, Joos E, Vanhove P, Famaey JP. A randomized placebo-controlled trial of sustainedrelease amitriptyline in primary fibromyalgia. Journal of Musculoskeletal Pain. 1996;4(3):37-47.
- Hannonen P, Malminiemi K, Yli-Kerttula U, Isomeri R, Roponen P. A randomized, double-blind, placebo-controlled study of moclobemide and amitriptyline in the treatment of fibromyalgia in females without psychiatric disorder. Br J Rheumatol. Dec 1998;37(12):1279-1286.
- 17. Heymann RE, Helfenstein M, Feldman D. A double-blind, randomized, controlled study of amitriptyline, nortriptyline and placebo in patients with fibromyalgia. An analysis of outcome measures. Clin Exp Rheumatol. Nov-Dec 2001;19(6):697-702.
- 18. Heymann RE, Helfenstein M, Feldman D. A double-blind, randomized, controlled study of amitriptyline, nortriptyline and placebo in patients with fibromyalgia. An analysis of outcome measures. Clin Exp Rheumatol. Nov-Dec 2001;19(6):697-702.
- 19. Hunter AM, Leuchter AF, Cook IA, et al. Brain functional changes and duloxetine treatment response in fibromyalgia: a pilot study. Pain Medicine. May-Jun 2009;10(4):730-738.
- Mease PJ, Clauw DJ, Gendreau RM, et al. The efficacy and safety of milnacipran for treatment of fibromyalgia. a randomized, double-blind, placebo-controlled trial.[Erratum appears in J Rheumatol. 2009 Mar;36(3):661]. J Rheumatol. Feb 2009;36(2):398-409.
- 21. Mease PJ, Russell IJ, Arnold LM, et al. A randomized, doubleblind, placebo-controlled, phase II trial of pregabalin in the treatment of patients with fibromyalgia. J Rheumatol. Mar 2008;35(3):502-514.
- 22. Pfizer. A 14-Week, Randomized, Double-Blind, Placebo-Controlled Trial of Pregabalin Twice Daily in Patients with Fibromyalgia. Protocol A0081100. 2008;PhRMA Web Synopsis: Lyrica/Pregabalin (Unpublished Study).
- 23. Russell IJ, Mease PJ, Smith TR, et al. Efficacy and safety of duloxetine for treatment of fibromyalgia in patients with or without major depressive disorder: Results from a 6-month, randomized, double-blind, placebo-controlled, fixed-dose trial. Pain. Jun 2008;136(3):432-444.
- 24. Straub TA. Endoscopic carpal tunnel release: a prospective analysis of factors associated with unsatisfactory results. Arthroscopy. Apr 1999;15(3):269-274.
- 25. Vitton O, Gendreau M, Gendreau J, Kranzler J, Rao SG. A double-blind placebo-controlled trial of milnacipran in the treatment of fibromyalgia. Human Psychopharmacology. Oct 2004:19 Suppl 1:S27-35.