About one-quarter of antidepressants, the analysis found. That some, such as cholesterol medicines, rarely are given as unap-

Eight out of 10 prescriptions for the epilepsy drug Topamax aren't used to treat viruses.

and hot flashes and to help them lose weight. They use antidepres-

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Terbutaline is an asthma drug, and the Food and Drug Administration hasn't approved it to prevent premature labor. The FDA has warned doctors that the treatment is "potentially dan-

Despite the rise in off-label drug use, the FDA has done little to address the issue. The practice, called off-label prescribing, often is driven by ques-

I wish I didn't have to use this thing," he said on the walkway through his studio apartment in New Baltimore, Mich. He's been told he can never have a baby again. His wife, Tammie Snyder, holds Presley, one of her twin daughters, in New Baltimore, Mich. Snyder was prescribed an asthma drug to prevent premature labor.
tory warning that Risperdal may be associated with an increase in strokes when prescribed off-label to elderly dementia patients. The public warning came nearly two years after the drug maker privately advised doctors that new studies suggested a small increase in stroke risk for those who were taking off-label.

FDA officials, in a written statement, said it took several rounds of questions to the drug maker before they had enough evidence to keep the drug company issue warning. Johnson & Johnson, based in New Brunswick, N.J., had not commented.

Dr. Michael Choonara, a professor in child health at the University of Birmingham, England, said off-label prescribing puts patients at greater risk than when doctors use FDA-approved directions.

“The definition is quite clear,” said Woolsey, who also is the director of one of the national cancer centers for drug research established by the federal government.

“The point is that the use of the drug was not approved by the government, and it was not approved by the government on a clinical trial,” she said.

How big is the issue? One study that did was published in 1999 in the Journal of the American Medical Association. Examining about 1,000 children, researchers found that the number of side effects among those who were taking off-label drugs was more frequent than those taking drugs used for approved uses.

“If you give a medicine in the right dose, and with good information on how a patient with that illness will handle it, you are less likely to get an adverse drug reaction than if you are prescribing outside of those boundaries,” said one of the authors of the study, Dr. Martin Choonara, a professor in child health at the University of Birmingham in London and a consultant at the Royal Children’s Hospital in Melbourne.

Others warn that Risperdal may be associated with an increase in strokes when prescribed off-label to elderly dementia patients. The public warning came nearly two years after the drug maker privately advised doctors that new studies suggested a small increase in stroke risk for those who were taking off-label.

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Doctors don’t have to go very far off-label to find a population that might benefit from simply prescribing a drug for less than its FDA-approved indication, which can cause problems.

In her 2001 phone call, a woman told Wyeth Laboratories that the Reglan, approved for gastrointestinal upset caused by motion sickness, had helped her with her tardive dyskinesia.”

One of the worst is tardive dyskinesia, a condition that causes tensed body movements and facial tic. Baker, now 35, said she never had told about this, so when the weight loss started fluctuating, she didn’t realize what was happening when she began to weigh every now and then that she was gaining. In the short period before Reglan, her symptoms worsened. Her primary care doctor quickly saw the connection.

“Risperdal. She said the drug maker, “I’ve been on it off and on it a few times. It’s important,” her psychiatrist said, “It’s a risk.”

She remembers making a job of her symptoms. She can’t only for short spells, her leg constantly tremors, and she’s basically loses her hands.

Dr. Gabriel Herbst of Fannie, Va., and drug maker Wyeth. Both declined comment. Wyeth, of Madison, Wis., has once sold its own off-label publications, after Wyeth noted that the drug’s label maintained both the risk of tardive dyskinesia and the drug was recommended for short-term therapy. In a court filing, Wyeth had said that Dr. Baker’s lawsuit.

The national prescription data from the Risperdal plaintiffs revealed the startling breadth of off-label prescribing. Nearly every drug has been prescribed off-label, and many are regularly.

Often, they based their conclusions on uncontrolled studies, published or observed from their own practices. Off-label prescribing can continue for years before a thorough clinical trial can be conducted because of the lack of side effect. Such data are not always ready on time.

Phen, an unapproved cocktail of drugs, was approved in 1997, when Mayo Clinic noticed that some patients were dying of heart-valve disease. From a rare heart-valve disease, Wyeth approved Phen, an unapproved cocktail of drugs, was approved in 1997, when Mayo Clinic noticed that some patients were dying of heart-valve disease.

Medical history is filled with examples of doctors who were convinced that an off-label treatment was safe and effective, only to discover it was wrong. Wyeth, of Madison, Wis., has once sold its own off-label publications, after Wyeth noted that the drug’s label maintained both the risk of tardive dyskinesia and the drug was recommended for short-term therapy. In a court filing, Wyeth had said that Dr. Baker’s lawsuit.

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RISKY & CIRCUITOUS

Once it’s on the market, a drug might be prescribed for a dozen or more unapproved conditions.

The FDA approved Topamax in 1996 as a supplemental treatment for epilepsy patients who are resistant to standard medicines. It has since proven to be effective in the treatment of migraines, depression and even obesity — even though it was never approved for those conditions.

In 1998, the FDA approved only for epilepsy patients. The data show that 50 percent of drugs are prescribed off-label, an association representative said. In 2003, the FDA approved it for use in treating obesity.

In 1998, Topamax was prescribed for one year, Aug. 2002-July 2003.*

The analysis looked at 900 million prescriptions written in 1998 and 2003 for more than 15 classes of medications, comparing drugs in 15 classes of medications, comparing drugs in more than 15 classes of medications, comparing drugs in a larger percentage of off-label use. When calculated using a small percentage of off-label use, 21 percent of the prescribing was excluded.

To my knowledge, this is the first study to examine the amount of off-label prescribing, a significant finding,
Drug-makers’ promotions boost off-label use by doctors

Questions to ask your doctor about off-label prescriptions

If you have ever heard of a medication being used for a purpose other than its FDA-approved label, chances are there is a good chance that the drug you are taking is being prescribed off-label. Off-label use is not uncommon; in fact, it is a growing trend in medicine. In this article, we will explore the reasons why doctors prescribe medications off-label and discuss the potential risks and benefits involved.

### What is Off-Label Use?
Off-label use refers to the practice of using a medication for a purpose other than what it was approved for by the FDA. This can include using the medication for a different indication, using it in a different population, or using it in a different dosage or duration than what was approved.

### Why Do Doctors Prescribe Off-Label?
While off-label use can be risky, it is not always bad. In some cases, it can be beneficial. Here are some reasons why doctors might prescribe medications off-label:

- **Lack of Approved Options:** Sometimes, there may not be an approved medication available for a specific indication.
- **Better Patient Outcomes:** Certain medications may be more effective or safer for a particular patient population when used off-label.
- **Innovative Treatment:** In some cases, doctors may prescribe off-label medications to try new treatments that have not yet been approved.

### Potential Risks of Off-Label Use
While off-label use can be beneficial, it also carries potential risks. Here are some of the potential risks associated with off-label use:

- **Lack of Research:** Off-label use is not subject to the same level of research as prescription drugs approved by the FDA.
- **Increased Risks:** Off-label use can lead to increased risks for patients, including side effects and unforeseen interactions.

### How to Talk to Your Doctor About Off-Label Use
If you are considering taking an off-label medication, it is important to talk to your doctor about the risks and benefits. Here are some questions you can ask to help make an informed decision:

- **What is the purpose of this medication?**
- **What is the potential benefit?**
- **What are the potential risks?**
- **What are the other options?**

By discussing these topics with your doctor, you can make an informed decision about whether off-label use is right for you.

### Conclusion
Off-label use is a complex issue that requires careful consideration. While there are potential risks, there are also opportunities for innovation and improved patient outcomes. As a patient, it is important to be informed about your medication and to discuss any concerns with your doctor. By doing so, you can help ensure that you are receiving the best care possible.

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Big money from off-label drugs

### Big money from off-label drugs

The use of off-label drugs has become increasingly common in recent years. According to a study published in the Journal of the American Medical Association, off-label use accounted for 30% of all drug prescriptions in 2010.

#### The Benefits of Off-Label Use
- **Increased Patient Outcomes:** Off-label use can lead to improved patient outcomes in certain cases. For example, a drug that is approved for one condition may also be effective for another condition that is not approved.
- **Innovative Treatments:** Off-label use can help doctors test new treatments that have not yet been approved.

#### The Risks of Off-Label Use
- **Lack of Research:** Off-label use is not subject to the same level of research as prescription drugs approved by the FDA.
- **Increased Risks:** Off-label use can lead to increased risks for patients, including side effects and unforeseen interactions.

#### How to Talk to Your Doctor About Off-Label Use
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- **What is the purpose of this medication?**
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Regulating prescription drugs

#### Regulating prescription drugs

Prescription drug regulation is a complex issue. Here are some key points to consider:

- **The FDA’s Role:** The FDA is responsible for ensuring that prescription drugs are safe and effective. This includes reviewing new drug applications and monitoring the use of existing drugs.
- **Off-Label Use:** As mentioned earlier, off-label use is a growing trend in medicine. While it can be beneficial, it also carries potential risks.

#### The Importance of Patient Education
It is important for patients to be educated about their medications, including the risks and benefits of off-label use. By discussing these topics with your doctor, you can help ensure that you are receiving the best care possible.
Cynical Band-Aid and patch some-
sales without going through the expensive and time-consuming process for the off-label use to be approved. Also interfering is the patent protection period. After a patient passes, their patent lapse, there’s little financial incentive for the companies to apply for approval of the off-label use. A threat from the off-label task force, the FDA attempted to hand out large fines, but largely fell short.

The pharma companies apply for FDA approval for proper label treatments. While the effort is intended to produce applications, the numbers have been dropping. From 1989 to 2002, the number of companies using existing drugs went from 21 to 10.

In an attempt to reverse the process, 2002 the FDA was dragged on for more than 10 years. The agency says it is in the range of continuing, or for doctors, and that doing that could cause revenue calculation errors.

An FDA-commissioned study has been called even clogged. The FDA task force has stepped away from plans, dating to 1993, to ensure that all patients get basic information about the drugs that play. Opposition has been fierce. Doctors have argued that the off-label task force frightens patients unnecessarily. To get around the challenge of an industry-run voluntary proj- ect, FDA officials have suggested they provide for various sites, relying instead in the use of a leaflet made by FDA-approved companies that includes backgrounders, the leaflet aimed at educating doctors and patients.


time to rewrite the labels doctors read better information in the hands of patients. The effort involves a full decade after the FDA receipt. Doctors have argued that the off-label task force frightens patients unnecessarily. To get around the challenge of an industry-run voluntary project, FDA officials have suggested they provide for various sites, relying instead in the use of a leaflet made by FDA-approved companies that includes backgrounders, the leaflet aimed at educating doctors and patients.

McClintock, a physician, said the agency “would like the FDA to see more evidence-supported procedures for off-label uses.”

Mark McClintock

Mark McClintock

In many ways, the FDA’s 1982 mandate to determine whether off-label use is safe and efficacious is a failure. In 1982, the National Heart, Lung and Blood Institute’s Task Force on Off-Label Use of Drugs recommended that the FDA work on a way to encourage doctors to report the use of off-label drugs. Since then, the number of reports has not increased.

Figure 1. No, but do you think you might want to try it? (Image Credit: Getty Images)

Many researchers have reported a lack of data on the use of off-label drugs. In a recent study, a team of researchers found that the use of off-label drugs is prevalent, with nearly 2.3 million prescriptions written for off-label uses in 1999 to 2002. This is a significant increase from the 1989 letter to Wyeth, one of the amiodarone makers. The FDA now requires drug companies to report off-label use, but the information is not used to inform patients or doctors.

Andersen’s husband and her daughter, Torry, in a family photo taken in 2002. (Image Credit: NYTimes.com)

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About the series

More than 30 newspapers published Ridder’s series about off-label use. Below are several editorials and front-page images that show how the series was played.

WILKES BARR (Pa.) TIMES LEADER
Nov. 2, 2003

THE MIAMI HERALD
Nov. 2, 2003

Vigilance for the cure of off-label drug woes

The unintended consequences of off-label prescribed medications can be a bitter pill.

The practice is legal, common and widely accepted.

But the six-month study by Knight Ridder showed the practice surprisingly common, with 157 million such prescriptions written in 2002. By some estimates, the drug companies are making $2 billion a year in sales. Commercial air travel is banned in exactly that way. Health care should be, too.

Second, America’s physicians should be the first to call for meaningful reforms.

Following a successful set of effective rules don’t hurt the medical profession. It helps, by ensuring doctors prescribe effective treatments and avoid unnecessary and dangerous off-label practices.

A fair amount of off-label prescription drug use is routine, inevitable. The number of unapproved uses for numerous conditions for which precisely prescribing drugs for treatments other than those for which they were approved is simply not available. Some diseases are rare and it is generally believed that drug companies have little financial incentive to invest in drug development. Other illnesses, like AIDS and cancer, require treatments with unknown risks in combination with other medicines. Other diseases may be generally beneficial, as well. Doctors are finding that regular small doses of certain drugs fight serious and often fatal diseases.

All the same, the findings of a Knight Ridder series of studies of off-label prescription use after claiming indications of the use of drugs are inappropriate for any individual illness and for durational durations unapproved by FDA and for diseases untreated by the Food and Drug Administration and to treat populations not targeted for the particular illness. Statistics show that one in five drugs approved and off-label uses, to health-care providers, are free to prescribe medications as they see fit. Patients are left to trust their doctors, they also need to know more about potential risks as well as the risks.

The Knight Ridder series on off-label use won a Pulitzer Prize, the Worth Bingham Prize, an Investigative Reporting Award, and the Livingston Award, and the Pulitzer Prize.

In the meantime, concerned patients should ask their doctors if the prescribed medication is off-label approved. Ask for a prescription and if there are free drug samples. Ask about possible risks. Ask about possible benefits. Ask about longer-term and short-term risks. Ask about the risks of the prescribed treatment caused added harms, rather than helping to care or comfort.

About the writers

Investigative reporter Alisen Young of the Knight Ridder Washington bureau was part of a six-person Knight team that won the Pulitzer for stories on Pentagon spending. She graduated from Iowa State University.

Tish Wells is the Knight Ridder bureau chief in New York, where she graduated from Columbia University. Wells also holds a master’s degree in library science from the University of Kansas.

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