The Arrhythmia Center provides the most

- Advanced treatment options.
- Therapies for patients diagnosed with atrial fibrillation and all heart rhythm disturbances.
# TABLE OF CONTENTS

1. WHAT IS ATRIAL FIBRILLATION? ................................................ 6

2. DIAGNOSING ATRIAL FIBRILLATION ...................................... 8

3. TREATING ATRIAL FIBRILLATION ........................................... 10

4. MEDICINES ........................................................................... 15

<table>
<thead>
<tr>
<th>Medicine</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solatol</td>
<td>15</td>
</tr>
<tr>
<td>Flecainide</td>
<td>16</td>
</tr>
<tr>
<td>Propafenone</td>
<td>17</td>
</tr>
<tr>
<td>Dofetilide</td>
<td>17</td>
</tr>
<tr>
<td>Amiodarone</td>
<td>19</td>
</tr>
<tr>
<td>Dronedarone</td>
<td>20</td>
</tr>
<tr>
<td>Metoprolol</td>
<td>21</td>
</tr>
<tr>
<td>Diltiazem</td>
<td>22</td>
</tr>
<tr>
<td>Digoxin</td>
<td>23</td>
</tr>
<tr>
<td>Warfarin</td>
<td>24</td>
</tr>
<tr>
<td>Dabigatran</td>
<td>28</td>
</tr>
<tr>
<td>Rivaroxiban</td>
<td>29</td>
</tr>
<tr>
<td>Apixaban</td>
<td>30</td>
</tr>
</tbody>
</table>
What Is Atrial Fibrillation?

Atrial fibrillation, or A-Fib, is an irregular heartbeat in the top chambers of the heart. It is the most common abnormal heart rhythm. About 2.5 million Americans currently have A-Fib.

By affecting your heart rhythm, A-Fib can also affect your heart rate or pulse. Your heart rate is how fast your heart is beating. A normal heart rate is an average of 60-90 beats per minute. Your heart rhythm is the regularity of your heartbeat.

Normally, an electrical signal controls rate and rhythm of the heartbeat. In A-Fib, an abnormality in this electrical system causes the top chambers (called the atria) to beat rapidly and irregularly. The beating is so fast the atria “quiver” instead of squeezing. When the atria quiver, they can’t pump as much blood to the lower chambers as they normally do. Some blood stays in the atria and can form clots. A-Fib can also make the heart rate (or pulse) be fast.

CAUSES
Many conditions may contribute to A-Fib, including:
• High blood pressure (#1 cardiac cause)
• Sleep apnea (#1 non-cardiac cause)
• Coronary artery disease
• Heart valve disease
• Thyroid disease
• Diabetes
• Heart failure
• Cardiomyopathy
• Recent heart or lung surgery
• Chronic lung disease
• Heart viral infection
• Age greater than 60

TRIGGERS
Common triggers include:
• Increased stress
• Excessive alcohol consumption
• Caffeine intake
• Stimulants found in some decongestant medicines or recreational drugs
• Dehydration
• Sleep deprivation

TYPES
Common types include:
• Paroxysmal A-Fib – Short episodes of A-Fib that come and go on their own (less than one week)
• Persistent A-Fib – Long episodes of A-Fib People who have Persistent A-Fib don’t go back into their normal rhythm on their own
• Longstanding or Permanent A-Fib – An A-Fib episode for one year or more, or if a person stays in A-Fib even with treatment
DANGERS
At one time, A-Fib was considered harmless. We know now that while A-Fib itself isn’t life threatening, it can lead to future problems, including:

• **Risk for stroke.** When the heart does not pump blood normally, a clot can form in the heart. If the clot is pumped out of the heart, it can travel to the brain and cause a stroke. If you have A-Fib, your risk of stroke is five times higher than someone who does not have A-Fib.

• **Heart failure.** By causing the heart to beat irregularly and fast, A-Fib can weaken the heart’s pumping ability. When A-Fib makes the heart beat fast over a long period of time, it can significantly weaken the heart and lead to heart failure. This can cause you to have swelling in your feet, legs or abdomen, trouble breathing, shortness of breath and being more tired than usual.

The good news is these risks can be dramatically reduced if A-Fib is properly monitored and treated. Whether or not you feel symptoms, A-Fib needs treatment to reduce the risk of stroke and heart failure. It is important to follow the treatment recommended for your unique situation.

WHAT ATRIAL FIBRILLATION IS NOT
A-Fib is called a “nuisance rhythm” by many doctors. This means it is not life threatening. While you may have chest pain with A-Fib, A-Fib is not a heart attack. Heart attacks are caused by blockage in a heart artery (we call this a “plumbing problem”). A-Fib is an abnormality with the heart’s electrical system (“a wiring problem”). People with A-Fib can still lead normal lives. If exercise is part of your normal routine, you are encouraged to continue. If you do not currently exercise, you are encouraged to do so. Exercise will not cause or trigger A-Fib. If your heart rate is less than 100 before you start, it is safe to engage in moderate exercise.
Diagnosing Atrial Fibrillation?

THE MOST COMMON WAYS TO DIAGNOSE A-FIB:

Take Your Pulse
1. Turn your left hand palm-side up, then place the first two fingers of your right hand on the outer edge of your left wrist just below where your wrist and thumb meet. Slide your fingers toward the center of your wrist. Press down until you feel your pulse, but don’t press too hard, or you won’t be able to feel it. DO NOT use your thumb.

2. Continue to feel your pulse for a full minute. Concentrate on whether the beats are evenly spaced, or whether they are uneven, with missed beats, extra beats or beats that are too close together. If your pulse feels irregular, you may be in A-Fib.

Get an EKG
This is an easy way to diagnose A-Fib, and it only takes a few minutes to do. Sticky sensors, called electrodes, are attached to your chest, arms and legs to detect and draw a picture of the electrical activity of the heart. This will show your heart’s rhythm at the time of the test.

Wear an Event Monitor
If you only have A-Fib symptoms sometimes, or for short periods, your health care provider may ask you to wear a heart monitor at home. Sticky electrodes are placed on your chest. Wires from the electrodes are attached to a small monitor. When you feel symptoms, you press a button on the monitor and it records the electrical activity of the heart, and the recorded information is sent to your health care provider’s office for evaluation. This lets your health care provider know if your symptoms are from A-Fib, a different heart rhythm problem or not from a heart problem at all.
Wear a Holter Monitor
A Holter monitor is similar to the event monitor described above, but usually worn for 24 or 48 hours, while the event monitor is worn for up to 30 days. The Holter monitor has more wires than the event monitor (five instead of two), and it records every beat of your heart while you wear it, instead of only when you push a button.

Zio Patch
The Zio Patch is noninvasive, water-resistant, has no leads or wires, and is discrete to wear. The patch continuously records heartbeats for up to 14 days – including during sleep, in the shower, and during moderate exercise – and has a large button on top for patients to capture symptomatic events.

Additional Tests
Your health care provider may do tests to try to find the cause of your A-Fib. They may do an echocardiogram, which is an ultrasound of the heart. The resulting images allow determination of any structural damage to the heart such as a leaky valve, if the heart’s pumping is weak or if the heart chamber’s size is increased.

They may also do blood tests to check your thyroid and electrolyte levels. If you are high risk for sleep apnea, your health care provider may recommend a referral for evaluation. If you have chest pain, a stress test may be recommended.
Untreated A-Fib can lead to future problems, such as stroke and heart failure. Many treatment options are available for A-Fib. In some cases, lifestyle changes can help reduce the frequency or severity of symptoms. Medicine can help. In addition, there are several catheter-based procedures and surgical techniques to treat and potentially cure A-Fib.

TREATMENT STRATEGIES
There are two main strategies for treating A-Fib: rate control and rhythm control. Research has shown (in older patients) that long-term outcomes for patients in both strategies are the same. What usually makes your health care provider choose one strategy over the other is how you feel when you are in A-Fib.

A-Fib patients need two things:
1. Treatment to reduce the risk of blood clots and stroke. This could be with medicine or a device, as described below.
2. Ensure your heart rate does not go too fast. Some people with A-Fib have a slow heart rate, but most have a heart rate that is too fast. Controlling fast heart rates allows the heart to pump blood efficiently and can protect against weakening of the heart muscle, which could lead to heart failure. Slowing the heart rate down can also help lessen any symptoms you may have with A-Fib, such as fatigue or shortness of breath. This is called rate control and typically involves taking one or more medicines to slow the heart rate.

With rate control, you still have an irregular heartbeat, but for people who do not feel bad in A-Fib, this may be the treatment option that your health care provider suggest for you. If you have symptoms with A-Fib that make you feel unwell or your daily functions have been impaired by A-Fib, your health care provider may recommend rhythm control. With this strategy, you will receive treatment to reduce your risk of blood clots and stroke, and your heart rate will be kept from going too fast as described above, but your health care provider will also use treatment to help get your heart in a normal rhythm and keep it there. This usually involves medicines and procedures such as cardioversion or ablation. These are described in more detail on next page.

TREATMENT OPTIONS
Lifestyle Changes
The following lifestyle changes may reduce or eliminate your A-Fib episodes:

- **Reduce your stress level.** Stress can trigger A-Fib in some people. It is only natural to worry, but try to relax. Try to take a few minutes each day to do something you enjoy.

- **Limit your use of caffeine.** Caffeine can trigger A-Fib episodes in some people. We usually recommend you have no more than one caffeinated drink such as coffee, cola or tea per day, and that you avoid energy drinks.

- **Limit your intake of alcohol.** Alcohol has been shown to trigger A-Fib episodes in some people.

- **Do not use illegal drugs.**

- **Maintain a healthy weight.** Recent studies have shown that being overweight can contribute to A-Fib.

- **Do not smoke.** If you smoke, quit.

**Treatment of Potential Causes**
Common causes of A-Fib are high blood pressure, sleep apnea and thyroid disease. People who have these conditions often have fewer A-Fib episodes if they follow their...
health care provider’s recommendations to keep them under control.

Medicines
There are a number of medicines used to treat A-Fib. Please see the Medicines section on page 15 for more information.

Cardioversion
Medicines alone are not always able to get your heart back in normal rhythm. In these cases, a cardioversion may be an option. This is a brief procedure done in the hospital. Medicine is given to make you sleepy. An electrode is placed on your chest, and another is placed on your back. An electrical shock is delivered through these pads to your heart to “reset” or “convert” it. Cardioversion frequently returns your heart to normal rhythm, but without medicine it will often go back out of rhythm again. Because of this, medicines are often given after cardioversion to help your heart stay in normal rhythm.

Pulmonary Vein Isolation (PVI)
A PVI is done most often for people who feel unwell in A-Fib and either medicine does not work to keep them in regular rhythm, or they have side effects from the medicines. A PVI can significantly decrease the symptoms people feel with A-Fib, and can cure A-Fib in some patients.

Research has shown the electrical signals that cause A-Fib most often come from the veins that carry blood from the lungs to the heart, called the pulmonary veins. During a PVI, catheters (long, thin tubes) are inserted into the veins in your groin and the right side of your neck. These are guided to the inside of the left atrium (the top left chamber of the heart). One of the catheters is used to find the heart tissue around the pulmonary veins that the abnormal electrical signals are coming from. Another catheter is then used to deliver energy to ablate (freeze or burn) this tissue. If your doctor sees abnormal electrical signals coming from other parts of the heart, those areas will also be ablated.

Over a period of about three to six months, the ablated areas heal and form very discrete areas of scarring. The abnormal electrical signals cannot get across the therapeutic scar to the rest of the heart to cause A-Fib. Until the ablation area heals, some people can still have A-Fib. This is expected, and because of this, you will continue to take your blood thinning medicines until your doctor determines it is safe for you to stop them (you may continue blood thinners indefinitely).

At Overlake Medical Center, a PVI is done under general anesthesia, which means you are completely asleep, and on a breathing machine. You won’t feel any pain or remember anything that happens during the procedure. Most patients who have a PVI spend one night in the hospital and go home the next day.
Maze Procedure
A MAZE is a surgical treatment for A-Fib. It is most commonly done for patients who have A-Fib and need heart surgery for another reason, such as bypass or valve repair. A MAZE can also be done for patients who do not need other heart surgery, if they have had a PVI in the past and their A-Fib has returned.

The most current MAZE method is called the Cox-Maze IV. During the procedure, a surgical clamp is applied to the tissue of the atria (top chambers of the heart). Energy is delivered through the clamp to make ablations (or burns) in the top chambers of the heart. The burns heal over time to form scar tissue that disrupts the electrical abnormalities that cause A-Fib, similar to what is done during PVI. Sometimes during a MAZE your surgeon will also close off a small pouch on the heart called the left atrial appendage, which is where the majority of blood clots that could cause a stroke originate.

AV Node Ablation
An AV node ablation is done most often for people who: 1) feel unwell in A-Fib, 2) other attempts to keep them in normal rhythm have not worked, and 3) it is very difficult to keep their heart rate slow. Fast heart rates over time can damage or weaken the heart muscle. The AV node is the bridge that carries the electrical signals from the atria (top part of the heart) to the ventricles (bottom part of the heart). Like a PVI, an AV node ablation uses catheters to ablate (or destroy) this bridge. When this is done, no signals are able to travel from the atria to the ventricles. This prevents the heart rate from going too fast. Because the ventricles are not getting any electrical signals, if you have an AV node ablation, you must also have a pacemaker implanted. The pacemaker will carry the electrical signals to make the ventricles beat. It is important to understand that you will always be dependent on the pacemaker to keep your heart beating. An AV node ablation will eliminate many symptoms of A-Fib, but does not cure the abnormal rhythm. This means you will need to stay on blood thinning medicines to protect against stroke.

An AV node ablation is done under a lighter sedation than a PVI – you won’t feel significant pain or remember much of what happens during the procedure, but you are not on a breathing machine – you are breathing on your own. Most patients spend one night in the hospital and go home the next day.

Pacemaker
The most common reason to get a pacemaker is to treat a heartbeat that is too slow. A pacemaker is a small device implanted under the skin in your chest with wires that connect the pacemaker to your heart. They can have one, two or three wires, depending on your specific needs. Pacemakers monitor the heart rate and send electrical signals to the heart to
make it beat if the rate gets too slow. Some of the medicines used to treat A-Fib can make the heart rate too slow. When this happens, it can be helpful to have a pacemaker to keep the heart rate up so that the medicine can be used to keep the heart in normal rhythm. The pacemaker does not treat A-Fib.
Medicines

There are three classes of medicines used to treat A-Fib:

- **Rhythm control medicines**
- **Rate control medicines**
- **Blood thinning medicines**

**Rhythm control medicines**

Rhythm control medicines (also called anti-arrhythmics) help get the heart back in a normal rhythm and/or keep it in normal rhythm. Commonly used anti-arrhythmics include sotalol (Betapace), flecainide (Tambocor), propafenone (Rythmol), dofetilide (Tikosyn), amiodarone (Cordarone or Pacerone) or dronedarone (Multaq).

Some people need to try different medicines to find one that works best for them. Once you find a medicine that works, you will have A-Fib less often and the symptoms may be milder, but it is still likely that you have A-Fib again.

Most people take anti-arrhythmic medicine every day, but some people who only have A-Fib episodes rarely may use a “Pill in the Pocket” technique, where they keep the medicine with them and only take it if they feel their heart go into A-Fib. Your health care provider will tell you which option is best for you.

**Sotalol**

*(brand names: Betapace, Betapace AF)*

Sotalol is a type of medicine called a beta blocker that also has an anti-arrhythmic action. It is used to treat abnormal heart rhythms called A-Fib and A-Flutter. In A-Fib and A-Flutter, sotalol helps control your heart rate and helps keep your heart in a normal rhythm.

**How To Use This Medicine**

Sotalol is usually prescribed to be taken twice a day. Take it exactly as your health care provider tells you, even if you feel fine. Do not take it more than your health care provider tells you to.

You should take sotalol on an empty stomach. If you take an antacid, take it two hours before or two hours after taking sotalol.

If you miss a dose of your sotalol, take it as soon as you can. If your next dose is less than six hours away, wait until then to take the medicine and skip the missed dose. Do not take two doses at the same time.

**Important Information**

Before taking sotalol, tell your health care provider if you have lung problems (such as asthma, chronic bronchitis or emphysema), any serious allergies or if you take allergy shots. Do not stop taking sotalol suddenly without asking your health care provider. You may need to slowly decrease your dose before stopping it completely.

**Drug Interactions**

There are many other drugs that can interact with sotalol. Make sure your health care provider knows about ALL other medicines you are taking, including over-the-counter medicines, vitamins and herbal supplements.

**Possible Side Effects**

Because it slows the heartbeat, people sometimes feel more tired when they first start taking sotalol. However, if you continue to take the medicine, this tiredness usually goes away within two to three weeks. If it does not get better, let your health care provider know.
If you are diabetic, sotalol can cause your blood sugar to be higher.

Call your health care provider right away if you notice any of these side effects:
- Allergic reaction: itching or hives, swelling in your face or hands, swelling or tingling in your mouth or throat, trouble breathing.
- Unusually slow heartbeat, fainting or worsening heart rhythm problems
- Chest pain or wheezing
- Fainting or severe dizziness
- Swelling in your ankles or feet

If you notice these less serious side effects, talk with your health care provider:
- Diarrhea, constipation, nausea, vomiting, heartburn or upset stomach
- Blurred vision, headache or hearing loss
- Feeling dizzy, drowsy, depressed or tired
- Problems with sex

**Flecainide**  
*(brand name: Tambocor)*
Flecainide is used to treat abnormal heart rhythms called A-Fib and A-Flutter. It helps keep your heart in a normal rhythm.

**How To Use This Medicine**
Flecainide is usually taken two or three times a day. Take it exactly as your health care provider tells you, even if you feel fine. Do not take it more often than your health care provider tells you to.

You can take flecainide with or without food. You can take it with food, milk or antacids if it upsets your stomach.

If you take flecainide twice a day and you miss a dose, take it as soon as possible, unless you are more than six hours late. If you are more than six hours late, skip the missed dose and be sure to take the next dose at the usual time. Do not take two doses at the same time.

**Important Information**
There are many antibiotics that you cannot take while you are taking flecainide. Check with your health care provider before taking any new medications while you are on flecainide. Do not stop taking flecainide suddenly without asking your health care provider. You may need to slowly decrease your dose before stopping it completely.

**Possible Side Effects**
Flecainide is a medicine that is usually well tolerated. Most people have few or no side effects. However, some people do have symptoms.

Call your health care provider right away if you notice any of these side effects:
- Allergic reaction: itching or hives, swelling in your face or hands, swelling or tingling in your mouth or throat, chest tightening, trouble breathing
- Chest pain, or worsening of heart rhythm problems
- Shortness of breath or trouble breathing
- Fever or chills
- Yellowing of skin or eyes

If you notice these less serious side effects, talk with your health care provider:
- Dizziness or lightheadedness
- Headache
- Nausea, vomiting, constipation or diarrhea
- Stomach cramps or loss of appetite
- Trembling or shaking
- Tiredness or weakness
- Vision changes such as trouble focusing or seeing spots
**Propafenone**  
*(brand names: Rythmol, Rythmol SR)*

Propafenone is used to treat abnormal heart rhythms called A-Fib and A-Flutter. Propafenone helps keep your heart in a normal rhythm.

**How To Use This Medicine**

Propafenone is usually prescribed to be taken two or three times a day. Take it exactly as your health care provider tells you, even if you feel fine. Do not take it more often than your health care provider tells you to.

You can take propafenone with or without food. Rythmol SR is an extended release capsule. If you are taking this, swallow it whole – do not crush, break or chew it.

If you take propafenone twice a day and you miss a dose, take it as soon as you can, unless it is more than six hours late. If it is more than six hours late, skip the missed dose and take it at your next usual time.

If you take it three times a day and you miss a dose, take it as soon as you can, unless it is more than four hours late. If it is more than four hours late, skip the missed dose. Be sure to take the next dose at the usual time.

Do not take two doses at the same time.

**Important Information**

Do not stop taking propafenone suddenly without asking your health care provider. You may need to slowly decrease your dose before stopping it completely.

**Drug Interactions**

There are many other drugs that can interact with propafenone. Make sure your health care provider knows about ALL other medicines you are taking, including over-the-counter medicines, vitamins and herbal supplements.

**Possible Side Effects**

Propafenone is usually well tolerated. Most people have few or no side effects. Call your health care provider right away if you notice any of these side effects:

- Allergic reaction: itching or hives, swelling in your face or hands, swelling or tingling in your mouth or throat, chest tightness, trouble breathing
- Blurred vision
- Chest pain, or worsening of heart rhythm problems
- Fever or chills
- Fainting
- Shortness of breath with cold sweat and bluish-colored skin
- Swelling in your ankles or feet

If you notice these less serious side effects, talk with your health care provider:

- Anxiety, dizziness or hot flashes
- Dry mouth or metallic, bitter taste
- Headache
- Nausea, vomiting, constipation or diarrhea
- Runny or stuffy nose
- Trembling or shaking

**Dofetilide**  
*(brand name: Tikosyn)*

Dofetilide is used to treat A-Fib. This medicine can help your heart go back into regular rhythm, and can help keep your heart in a regular rhythm longer.

**How To Use This Medicine**

Take it exactly as your health care provider tells you, even if you feel fine. Do not take it more often than your doctor tells you to. Dofetilide should be taken twice a day, with or without food. Take the doses at the same time every day, 12 hours apart from each other.

Do not eat grapefruit or drink grapefruit juice.
while you are taking this medicine.

Have all blood tests and EKGs done as your health care provider orders. This helps to make sure you are getting the correct dose of medicine.

Since you may not be able to get this medicine at your regular pharmacy, tell your local pharmacist that you are taking dofetilide. This will help keep you from getting other medicines that may interact with dofetilide.

If you have to be hospitalized, be sure to take your dofetilide with you as the hospital may not carry it.

If it is two hours or less from the time you were due to take dofetilide, go ahead and take it. Otherwise, SKIP the missed dose. DO NOT take two doses at the same time.

**Important Information**

To establish the right dose of dofetilide for you, it must be started in a hospital where your heart rate and rhythm and kidney function will be checked for the first three days of treatment. It is important that when you go home, you take the exact dose of dofetilide your health care provider prescribed for you. While you take dofetilide, always watch for signs of an abnormal heartbeat.

Some common medicines that CANNOT be taken with dofetilide are:
- Cimetidine (also called Tagamet)
- Hydrochlorothiazide (HCTZ) alone or in combination with other medicines (such as Hydrodiuril, Microzide, Hydro-Par, Oretic, Esidrix, Ezide or any medicine with HCT or HCTZ in the name)
- Verapamil (also called Calan, Covera – HS, Isoptin, Verelan or Tarka)

**Drug Interactions**

Taking dofetilide with certain medicines can make you more likely to have a dangerous abnormal heart rhythm. There are MANY medications that can interact with dofetilide, so it is important that ALL the health care providers who prescribe medicine for you know that you are on dofetilide.

**Antibiotics And Dofetilide**

If you are prescribed an antibiotic, it is very important that you tell the health care provider who prescribed the antibiotic you are also taking dofetilide. There are several antibiotics that cannot be taken with dofetilide because they increase the chance of having a dangerous heart rhythm. The following list should help your health care provider choose an antibiotic that is safe for you to take with dofetilide.

**Antibiotics that CANNOT be taken with dofetilide:**
- **Macrolide antibiotics**, including Erythromycin, Z-Pak and Ketek.
- **Bactrim DS or Septra DS.**
- **Fluroquinolone antibiotics**, including Levaquin, Ciprofloxacin and Norfloxacin.

**Antibiotics that CAN be taken with dofetilide:**
- **Penicillins**, including Amoxicillin, Augmentin, and Dicloxicillin
- **Cephalosporins**, including Keflex, Omnicef, Celdor, Duricef, Cedax and Cefzil
- **Clindamycin**, 150 mg or 300 mg
- **Nitrofurantoin**, including Macrodantin and Macrobid
- **Aminoglycosides**, including
Gentamycin, Tobramycin, and Amikacin

**Possible Side Effects**
A rare, but serious side effect of dofetilide is a different kind of irregular heart rhythm that can sometimes be life-threatening. This type of irregular heartbeat can be treated if detected right away. For this reason, when you first start on dofetilide you will need to stay in the hospital for at least three days. The risk of this side effect is highest in the first few days. During the first few days, your heart rhythm will be monitored and your dose of this medicine will be adjusted as needed. Getting you on the dose of dofetilide that is right for you is the best way to prevent this serious side effect.

Call your health care provider right away if you notice any of these side effects:
- A fast heartbeat that feels different than A-Fib
- Racing heart or pounding in your chest
- Fainting or lightheadedness
- Diarrhea that is severe or goes on for several days
- Increased sweating
- Vomiting
- Loss of appetite
- Increased thirst

Go to the nearest emergency department (and take your dofetilide with you) if you can’t reach your health care provider right away and you have:
- A fast heartbeat that feels different than A-Fib
- Racing heart or pounding in your chest
- Fainting or lightheadedness

Tell your health care provider if you have any other side effects that bother you or do not go away.

**Amiodarone** *(brand names: Cardarone, Pacerone)*
Amiodarone helps in the management of heart rhythm abnormalities. It is a very effective medicine, but may produce side effects that your health care provider will need to monitor. Amiodarone is used to help keep the heart in normal rhythm, or to help return it to normal rhythm.

**Important Information**
Amiodarone is a very useful, effective medicine that your health care provider will start only if it is in your best interest. The possible side effects listed below, while not common, do mean that monitoring is important. You will need to see your doctor every six months while you are on amiodarone. You will need blood tests to make sure your thyroid and liver function has not changed and that no other problems have developed, including any interaction with your INR level (how long it takes for your blood to clot) if you are taking Coumadin (warfarin). You should also have your eyes and lungs checked at least once a year while you are on amiodarone.

Because of the potential for side effects, amiodarone is best used for short-term treatment. If long-term treatment is needed, ask your health care provider if another medicine may be right for you.

**Possible Side Effects**
Although generally well tolerated, amiodarone does have side effects that can affect different parts of your body.

**Skin** — When taking amiodarone, the skin can take on a grayish/blue tinge. This will go...
away after you stop taking the medicine, but it can take a long time.

While taking amidarone, you may become more sensitive to sunburn, so it is important to use sunblock while in the sun. Continue using sunblock for a few months after stopping amidarone, as it remains in the body for a long period of time after you stop taking it.

**Eyes** – Small deposits can form in the cornea of the eye. These deposits are not harmful, but you may notice the effect of these eye deposits if looking at bright lights at night time. Ten percent of people taking amidarone will see a bluish halo when looking at a light. You should see an eye doctor once a year while you are taking this medication.

**Liver** – Amidarone can sometimes cause problems with the function of the liver, which may be improved by lowering the dose of the amidarone. Your doctor should do routine blood tests to check your liver function.

**Thyroid** – Your thyroid makes a hormone that controls your metabolism. Amidarone can affect the thyroid, causing it to be either overactive (this occurs in 2% of people) or underactive (this occurs in 6% of people). You will need to have regular blood tests to check if either of these conditions has developed. Both an overactive and underactive thyroid can be easily treated with medicines. If you have symptoms of extreme tiredness or restlessness, you should tell your health care provider.

**Lungs** – Amidarone can cause problems with thickening (fibrosis) of some of the structures of the lungs. If you feel you have problems with worsening shortness of breath after you start taking this medication, you should tell your health care provider.

**Dronedarone** *(brand name: Multaq)*
Dronedarone is often used to treat heart rhythm problems A-Fib and A-Flutter.

**How To Use This Medicine**
Take it exactly as your health care provider tells you, even if you feel fine. Do not take it more often than your health care provider tells you to. Dronedarone is prescribed to be taken twice a day, with food. Take one with your morning meal and one with your evening meal. Do not eat grapefruit or drink grapefruit juice while you are taking this medicine.

If you miss a dose of dronedarone, take it as soon as you remember. If it is within six hours of your next dose, SKIP the missed dose. DO NOT take two doses at the same time.

**Important Information**
Before taking dronedarone, make sure your health care provider knows if you have liver disease, a history of heart failure, or low potassium or magnesium in the blood. Blood tests to monitor liver function are performed periodically.

**Possible Drug Interactions**
There are many medicines that can interact with dronedarone. Some medicines (such as digoxin, and many others) may need to be stopped or have the doses lowered before you start taking dronedarone.

Make sure your health care provider knows about ALL other medicines you are taking,
including over-the-counter medicines, vitamins and herbal supplements (especially St. John’s Wort).

**Possible Side Effects**

Many people have few or no side effects. The most common complaint is an upset stomach. Most side effects go away with the first two weeks of starting dronedarone, however.

Call your health care provider right away if you notice any of these side effects:

- Allergic reaction: itching or hives, swelling in your face or hands, swelling or tingling in your mouth or throat, wheezing, trouble breathing
- Any symptoms of heart failure, including: swelling of your ankles, feet or hands, unusual tiredness
- Heart rate much slower than before you started dronedarone
- Chest pain
- Change in how much or how often you urinate
- Dry mouth, increased thirst, muscle cramps, nausea or vomiting
- Any new or worsening symptoms

If you notice these less serious side effects, talk with your health care provider:

- Mild nausea, upset stomach or diarrhea
- Unpleasant taste in your mouth

**Rate Control Medicines**

Rate control medicines are used to help slow the heart rate during A-Fib. Fast heart rates over time can weaken the heart and lead to heart failure. Commonly used rate control medicines include metoprolol (Lopressor, Toprol), diltiazem (Cardizem) and digoxin (Digitek, Lanoxin).

A common side effect of rate control medicines is feeling fatigued or tired, but this usually goes away in a few weeks once your body gets used to the medicine. Some people do need to try different medicines to find one that works best for them and has the fewest side effects.

**Metoprolol**

*(brand names: Lopressor, Toprol)*

Metoprolol is used to treat A-Fib and A-Flutter. It can also be used to treat high blood pressure. In A-Fib and A-Flutter, metoprolol helps keep your heart from beating too fast, but it does not put your heart into a normal rhythm.

**How To Use This Medicine**

Metoprolol is usually taken once or twice a day. Take it exactly as your health care provider tells you, even if you feel fine. Do not take it more often than your health care provider tells you to. You should take metoprolol with a meal or just after you eat. Toprol XL is an extended release tablet. You may break it into two pieces, but swallow the two pieces whole and do not crush or chew them.

If you miss a dose, take it as soon as you can. If it is almost time for your next dose, skip the missed dose and be sure to take the next dose at the usual time.

Do not take two doses at the same time unless your health care provider tells you to.

**Important Information**

Before taking metoprolol, tell your health care provider if you have lung problems (such as asthma, chronic bronchitis or emphysema), any serious allergies, or if you take allergy
shots. Do not stop taking metoprolol suddenly without talking to your health care provider, as this may make your heart beat too fast. You may need to slowly decrease your dose before stopping it completely.

**Possible Drug Interactions**

There are other drugs that can interact with metoprolol. Make sure your health care provider knows about ALL other medicines you are taking, including over-the-counter medicines, vitamins and herbal supplements.

**Possible Side Effects**

Because it slows your heart rate, many people feel more tired when they first start taking metoprolol. However, if you continue to take the medicine, this tiredness usually goes away within two to three weeks. If it does not improve, tell your health care provider. If you are diabetic, metoprolol can cause your blood sugar to be higher.

Call your health care provider right away if you notice any of these side effects:

- Allergic reaction: itching or hives, swelling in your face or hands, swelling or tingling in your mouth or throat, chest tightness, trouble breathing
- Unusually slow heartbeat, fainting or worsening heart rhythm problems
- Chest pain
- Wheezing
- Swelling in your ankles or feet

If you notice these less serious side effects, talk with your health care provider:

- Diarrhea, constipation, nausea, vomiting, heartburn or upset stomach
- Blurred vision, headache or hearing loss
- Feeling dizzy, drowsy, confused, depressed or tired

- Memory problems
- Problems with sex

**Diltiazem**  
(brand names: Cardizem, Tiazac)

Diltiazem is a type of medicine called a calcium channel blocker. It is used to treat abnormal heart rhythms called A-Fib and A-Flutter. It can also be used to treat high blood pressure or angina (chest pain). In A-Fib and A-Flutter, diltiazem helps keep your heart from beating too fast, but it does not put your heart into a normal rhythm.

**How To Use This Medicine**

Diltiazem is usually taken once or twice a day, but your health care provider may have you take it up to four times a day. Take it exactly as your health care provider tells you, even if you feel fine. Do not take it more often than your health care provider tells you to.

If your medicine ends with CD, XT, XL or ER, it is “extended release;” do not crush, chew, break or open an extended-release tablet or capsule. Swallow it whole. Breaking or opening the pill may cause too much of the medicine to be release at one time. If you have trouble swallowing a diltiazem capsule whole, ask your health care provider if it is safe for you to open the capsule and sprinkle the medicine into a spoonful of applesauce to make swallowing easier.

If you miss a dose, take it as soon as you can. If it is almost time for your next dose, skip the missed dose and take it at your next usual time. Do not take two doses at the same time unless your health care provider tells you to.
Important Information
Before taking diltiazem, tell your doctor if you have kidney disease, liver disease, or congestive heart failure. Do not use diltiazem if you have low blood pressure, if you have recently had a heart attack or have heart rhythm problems called “sick sinus syndrome” or “heart block,” unless you have a pacemaker.

Grapefruit and grapefruit juice may interact with diltiazem and lead to potentially dangerous effects. Ask your health care provider if it is safe for you to eat grapefruit. Diltiazem can make you sunburn more easily. Wear protective clothing and use sunscreen when you are outdoors. Avoid tanning beds.

Possible Drug Interactions
There are other medicines that can interact with diltiazem. Make sure your health care provider knows about ALL other medicines you are taking, including over-the-counter medicines, vitamins and herbal supplements, especially cold or cough medicines or diet pills. Many contain ingredients that raise your heart rate and blood pressure.

Possible Side Effects
Many people feel dizzy or more tired when they first start taking diltiazem. If you continue to take the medicine, this tiredness usually goes away within one to two weeks. If it does not get better, let your health care provider know. Stand up slowly to minimize dizziness. Call your health care provider right away if you notice any of these side effects:
• Allergic reaction: itching or hives, swelling in your face or hands, swelling or tingling in your mouth or throat, chest tightness, trouble breathing
• A red, blistering skin rash
• Unusually low heartbeat, fainting or worsening heart rhythm problems
• Swelling in your hands, ankles or feet
• Upper stomach pain, loss of appetite, dark urine, clay-colored stools, or yellowing of skin or eyes

If you notice these less serious side effects talk with your health care provider:
• Nausea or upset stomach
• Headache
• Sore throat, cough or stuffy nose
• Flushing

Digoxin (brand names: Digitek, Lanoxin)
Digoxin is a used to treat A-Fib or A-Flutter. In some people with heart failure it can be used to increase the strength of the heart’s squeeze and improve symptoms.

How To Use This Medicine
Digoxin is prescribed as a once a day medicine. Sometimes your health care provider may ask you to take it twice a day for a short time when you first start taking it.

Important Information
Digoxin is safe for long-term use, but you should have regular checkups while taking it. You should see your health care provider once or twice a year. Generally, the effects of digoxin can be monitored through a physical examination (checking your pulse and blood pressure, or doing an EKG).

Possible Side Effects
Digoxin is usually well tolerated with few side effects. Most people who take it will notice their pulse or heart rate is slower. This is an expected effect of the medicine and is not a cause for concern unless the rate is very
slow (<50 beats a minute). Because digoxin slows your heart rate, some people feel more tired when they first start taking it until they become used to the medicine. Other common effects include:

- Dizziness or drowsiness
- Anxiety
- Depression
- Headache

Rarely, even when the dose has not changed and you have taken it as prescribed, digoxin can cause toxicity, which means high levels of the medicine are in your blood. Symptoms of toxicity include:

- Blurred vision
- Seeing a yellow halo around objects
- Loss of appetite
- Nausea
- Vomiting
- Diarrhea
- Confusion
- Drowsiness
- Dizziness
- Nightmares
- Agitation

Toxicity can be easily diagnosed with a blood test, and another medicine can be given to help your body get rid of the extra digoxin in your system.

Call your health care provider right away if you notice any of these side effects:

- Allergic reaction: itching or hives, swelling in your face or hands, swelling or tingling in your mouth or throat, chest tightness, trouble breathing
- Any of the signs or toxicity listed above
- Skin rash
- Extreme dizziness or fainting
- Swelling in your legs and feet

- Unusual weight gain
- Any new or bothersome symptoms

**Blood Thinning Medicines**

Blood thinning medicines (also called anticoagulants) keep the blood thin, and reduce the risk of blood clots and stroke, but do not eliminate the risk. The most commonly used blood thinners for A-Fib are aspirin and warfarin (Coumadin). There are also newer medicines called dabigatran (Pradaxa), rivaroxaban (Xarelto), and apixaban (Eliquis).

**Warfarin**  
*(brand name: Coumadin)*

Warfarin is used to reduce the risk of blood clots and strokes in people with A-Fib, people with a mechanical heart valve or people with certain blood-clotting disorders.

**How To Use This Medicine**

Take warfarin once a day in the evening. If you miss a dose, take it as soon as you can. If it is almost time for your next dose, wait until then to take it and skip the missed dose. Do not take two doses at the same time.

**Important Information**

When taking warfarin, you must have regular blood tests to check your international normalized ratio (INR). This is a test that tells your health care provider how long it takes your blood to clot, as well as how thin or thick your blood is. Your health care provider will usually want your INR level to be between two and three. It is very common for your medicine dose to be adjusted, depending on your INR level. An INR higher than four means your blood is too thin, which could put you at increased risk for bleeding. An INR less than two may mean your blood is too thick.
and you are not protected from blood clots and stroke.

Do not stop taking warfarin without talking to your health care provider, as this could increase your risk of having a stroke. If you have to stop taking it, your health care provider may give you a different blood-thinner instead.

Tell your health care provider if you are planning to have any surgery, or medical or dental procedure because you may have to stop taking warfarin for a short time. You may bleed and bruise more easily, and it may take longer for bleeding to stop while you are taking warfarin, but if you keep your INR at the recommended level, the risk of bleeding is reduced.

Possible Drug Interactions
Patients who take warfarin should talk to the provider who checks their INR level before taking any new medication, including over-the-counter (non-prescription) drugs, herbal medicines, vitamins, or any other products. A large number of these medicines (especially antibiotics) can interact with warfarin. Some raise the INR (meaning they make the blood thinner) and others lower the INR (make the blood thicker). For example, Robitussin and Imodium both make the blood thinner. You may need to have your INR checked before starting the new medicine and then again a few days later. Your warfarin dose may need to be adjusted.

Possible Food Interactions
Some foods can interfere with warfarin’s effectiveness. You should talk to the provider who checks your INR before making major dietary changes, such as starting a diet to lose weight, or starting a nutritional supplement or vitamin.

Vitamin K – Vitamin K is the antidote for warfarin, which means it counteracts it. Eating foods high in vitamin K makes warfarin less effective, and potentially increases the risk of blood clots. People who take warfarin should eat a relatively similar amount of vitamin K each week. Some foods have a high level of vitamin K, including kale, spinach; collard, turnip or mustard greens; and Brussels sprouts. Foods with a medium amount of Vitamin K include asparagus, broccoli, cabbage, and green leaf and romaine lettuce. Iceberg lettuce only has a small amount of Vitamin K. It is not necessary to avoid these foods; however, you should eat a relatively similar amount on a regular basis rather than eating a larger serving occasionally. The key is consistency – if you eat the same amount, your warfarin can be dosed around your diet. Refer to the list of Vitamin K amounts in different foods on page 26 to help plan your diet.

Cranberries and Cranberry Juice – There have been mixed reports on the effect of cranberry juice in people who take warfarin. Some experts have reported drinking cranberry juice while on warfarin can cause the blood to be too thin and increase the risk of bleeding. However, a small study found that drinking one 8-ounce serving of cranberry juice per day for seven days had no effect on the INR. It is possible that larger amounts could have a more significant effect. The best advice is probably to avoid consuming large amounts of cranberry juice, and to talk to the provider who checks your INR about possible interactions.
Alcohol – Alcohol affects the body’s ability to process warfarin. Alcohol should be limited to no more than one to two drinks occasionally. In addition, drinking excessive amounts of alcohol can increase the risk of injury, and therefore, bleeding.

Possible Side Effects
Many people find they bruise more easily when they are taking warfarin. If you notice you are bruising without injuring yourself, you should have your INR checked to make sure it is not too high. Warfarin can also cause bleeding that can be serious or even life-threatening.

Seek medical attention immediately if you have any of these:
- Allergic reaction: itching or hives, swelling in your face or hands, swelling or tingling in your mouth or throat, wheezing, trouble breathing
- Persistent nausea, stomach upset, or vomiting blood or vomit that looks like coffee grounds
- Headaches, dizziness or weakness
- Nosebleeds
- Red, pink or brown urine
- Bloody or black, tarry stools
- Coughing up blood
- Pain, discomfort or swelling, especially after an injury
- A serious fall or head injury, even if there are no other symptoms
- Bleeding that you cannot control
- Sudden or severe headache, confusion, or problems with vision, speech or walking. This could be a sign of stroke

Call the person who checks your INR if you notice:
- Bleeding from the gums after brushing your teeth
- Swelling or pain at an injection site
- Excessive menstrual bleeding or bleeding between menstrual periods
- Diarrhea, vomiting or inability to eat for more than 24 hours (this can affect your INR level)
### Vitamin K levels in foods

<table>
<thead>
<tr>
<th>FOOD NAME</th>
<th>SERVING SIZE</th>
<th>VITAMIN K AMOUNT (MICROGRAMS)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HIGH LEVEL VITAMIN K FOODS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kale, frozen (cooked or boiled, drained)</td>
<td>1/2 cup</td>
<td>573</td>
</tr>
<tr>
<td>Kale, fresh (cooked or boiled, drained)</td>
<td>1/2 cup</td>
<td>531</td>
</tr>
<tr>
<td>Spinach, frozen (cooked or boiled, drained)</td>
<td>1/2 cup</td>
<td>514</td>
</tr>
<tr>
<td>Spinach, fresh (cooked or boiled, drained)</td>
<td>1/2 cup</td>
<td>444</td>
</tr>
<tr>
<td>Broccoli, fresh (cooked, drained)</td>
<td>1/2 cup</td>
<td>110</td>
</tr>
<tr>
<td>Collard greens, frozen (cooked, drained)</td>
<td>1/2 cup</td>
<td>530</td>
</tr>
<tr>
<td>Turnip greens, frozen (cooked, drained)</td>
<td>1/2 cup</td>
<td>426</td>
</tr>
<tr>
<td>Mustard greens (cooked or boiled, drained)</td>
<td>1/2 cup</td>
<td>251</td>
</tr>
<tr>
<td>Brussels sprouts, frozen (cooked, drained)</td>
<td>1/2 cup</td>
<td>150</td>
</tr>
<tr>
<td>Onions, spring or scallions (green), raw</td>
<td>1/2 cup</td>
<td>184</td>
</tr>
<tr>
<td><strong>MODERATE LEVEL VITAMIN K FOODS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asparagus, frozen (cooked, drained)</td>
<td>1/2 cup</td>
<td>72</td>
</tr>
<tr>
<td>Asparagus, fresh (cooked, drained)</td>
<td>4 spears</td>
<td>48</td>
</tr>
<tr>
<td>Beans, green, snap, canned (cooked, drained)</td>
<td>1/2 cup</td>
<td>30</td>
</tr>
<tr>
<td>Broccoli, frozen (cooked, drained)</td>
<td>1/2 cup</td>
<td>81</td>
</tr>
<tr>
<td>Broccoli, raw</td>
<td>1/2 cup</td>
<td>45</td>
</tr>
<tr>
<td>Cabbage (cooked, drained)</td>
<td>1/2 cup</td>
<td>82</td>
</tr>
<tr>
<td>Cabbage, raw</td>
<td>1/2 cup</td>
<td>27</td>
</tr>
<tr>
<td>Coleslaw (fast-food type)</td>
<td>3/4 cup</td>
<td>56-70, depending on restaurant</td>
</tr>
<tr>
<td>Lettuce (butterhead, Boston, bibb)</td>
<td>1 cup chopped</td>
<td>56</td>
</tr>
<tr>
<td>Lettuce (romaine)</td>
<td>1 cup</td>
<td>50</td>
</tr>
<tr>
<td>Lettuce (green leaf)</td>
<td>1 cup</td>
<td>46</td>
</tr>
<tr>
<td>Okra, fresh (cooked, drained)</td>
<td>1/2 cup</td>
<td>32</td>
</tr>
<tr>
<td>Okra, frozen (cooked, drained)</td>
<td>1/2 cup</td>
<td>44</td>
</tr>
<tr>
<td>Peas, frozen, with pod (cooked, drained)</td>
<td>1/2 cup</td>
<td>24</td>
</tr>
<tr>
<td>Peas, fresh, wih pod (cooked, drained)</td>
<td>1/2 cup</td>
<td>26</td>
</tr>
<tr>
<td>Peas, green, frozen (cooked, drained)</td>
<td>1/2 cup</td>
<td>24</td>
</tr>
<tr>
<td>Sauerkraut, canned</td>
<td>1/2 cup</td>
<td>41</td>
</tr>
<tr>
<td>Spinach, raw</td>
<td>1/2 cup</td>
<td>73</td>
</tr>
<tr>
<td><strong>LOW LEVEL VITAMIN K FOODS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beans, green, canned (cooked, drained)</td>
<td>1/2 cup</td>
<td>10</td>
</tr>
<tr>
<td>Beans, green, snap, fresh (cooked, drained)</td>
<td>1/2 cup</td>
<td>10</td>
</tr>
<tr>
<td>Celery, raw</td>
<td>1/2 cup</td>
<td>15</td>
</tr>
<tr>
<td>Cucumber, with peel, raw</td>
<td>1/2 cup</td>
<td>9</td>
</tr>
<tr>
<td>Lettuce (iceberg, crisphead)</td>
<td>1 cup chopped</td>
<td>14</td>
</tr>
<tr>
<td>Margarine/vegetable oil spread, 60% fat</td>
<td>1 Tablespoon</td>
<td>14.5</td>
</tr>
<tr>
<td>Oil, canola</td>
<td>1 Tablespoon</td>
<td>17</td>
</tr>
<tr>
<td>Oil, olive</td>
<td>1 Tablespoon</td>
<td>8</td>
</tr>
<tr>
<td>Oil, other (peanut, sesame, safflower, corn, sunflower, soybean)</td>
<td>1 Tablespoon</td>
<td>3 or less</td>
</tr>
<tr>
<td>Peppers, green bell, cooked</td>
<td>1/2 cup</td>
<td>9</td>
</tr>
<tr>
<td>Tomatoes, red, ripe, raw</td>
<td>1/2 cup</td>
<td>7</td>
</tr>
</tbody>
</table>
**Dabigatran**  
*(brand name: Pradaxa)*  
Dabigatran is used to reduce the risk of stroke and blood clots in people with A-Fib.

**How To Use This Medicine**  
Dabigatran is prescribed to be taken twice a day. Take it exactly as your health care provider tells you, even if you feel fine. Do not take it more often than your health care provider tells you to.

You can take dabigatran with or without food. If your stomach is upset after taking it on an empty stomach, try taking it with food. Do not crush, chew or open dabigatran capsules – you need to swallow them whole.

If you miss a dose of dabigatran, take it as soon as you remember. If it is within six hours of your next dose, SKIP the missed dose. DO NOT take two doses at the same time.

**Important Information**  
Do not stop taking dabigatran without talking to your health care provider first, as this could increase your risk of having a stroke. Tell your health care provider if you are planning to have any surgery, or medical or dental procedure because you may have to stop taking dabigatran for a short time.

**Possible Drug Interactions**  
Some medicines can increase your chance of bleeding if you take them with dabigatran. Make sure your health care provider knows about ALL other medicines you are taking, including aspirin, pain medicines, over-the-counter medicines, vitamins and herbal supplements.

**Possible Side Effects**  
Dabigatran can cause bleeding that can be serious. While on dabigatran, you may bruise more easily, and it may take longer for any bleeding to stop.

Call your health care provider right away if you notice any of these side effects:

- Allergic reaction: itching or hives, swelling in your face or hands, swelling or tingling in your mouth or throat, wheezing, trouble breathing
- Any unexpected bleeding or bleeding that last a long time, such as unusual bleeding from your gums, nose bleeds that happen often, menstrual or vaginal bleeding that is heavier than normal
- Bleeding that is severe or cannot be controlled
- Pink or brown urine
- Bloody or black, tarry stools
- Bruises that happen without a known causes or ones that get larger
- Coughing up blood
- Vomiting blood, or vomit that looks like coffee grounds
- Unexpected pain, swelling or joint pain
- Headaches, feeling dizzy or weak
- Sudden or severe headache, confusion, or problems with vision, speech, or walking These could be signs of stroke
- Any new or bothersome symptoms

If you notice these less serious side effects, talk with your health care provider:

- Stomach upset or burning
- Stomach pain
**Rivaroxiban**  
*(brand name: Xarelto)*

Rivaroxiban is used to reduce the risk of stroke and blood clots in people with A-Fib.

**How To Use This Medicine**

Take rivaroxiban once a day with your evening meal. If you miss a dose, take it as soon as you can. If it is almost time for your next dose, wait until then to take it and skip the missed dose. Do not take two doses at the same time. If you accidentally take too much, call your health care provider right away or go to the nearest emergency room.

**Important Information**

Do not stop taking rivaroxiban without talking to your health care provider, as this could increase your risk of having a stroke. If you have to stop taking it, your health care provider may give you a different blood thinner instead.

Tell your health care provider if you are planning to have any surgery, or medical or dental procedure, because you may have to stop taking rivaroxiban for a short time. You may bleed and bruise more easily, and it may take longer for bleeding to stop while you are taking this medicine. Be careful to avoid injuries.

**Possible Drug Interactions**

You may have a higher risk of bleeding if you take rivaroxiban with other medicines that thin the blood, including warfarin/Coumadin, clopidogrel/Plavix, prasugrel/Effient or ticagrelor/Brilinta, as well as aspirin or pain medicines such as ibuprofen or naproxen. Also, some medicines may affect the way rivaroxiban works, including some antibiotics, antiviral medicines and seizure medicines.

It is very important to tell your health care provider about ALL medicines (including vitamins and over-the-counter medicines) you are taking BEFORE you start taking rivaroxiban. Talk to your health care provider before taking ANY new medicines while taking rivaroxiban.

**Possible Side Effects**

Rivaroxiban can cause bleeding that can be serious. Call your health care provider right away if you notice any of these side effects:

- Allergic reaction: itching or hives, swelling in your face or hands, swelling or tingling in your mouth or throat, wheezing, trouble breathing
- Tingling or numbness in your legs, especially if you had a procedure where a needle was inserted into your spinal column
- Any unexpected bleeding or bleeding that lasts a long time, such as unusual bleeding from your gums, nose bleeds that happen often, menstrual or vaginal bleeding that is heavier than normal
- Bleeding that you cannot control
- Red, pink or brown urine
- Bloody or black, tarry stools
- Coughing up blood
- Vomiting blood, or vomit that looks like coffee grounds
- Sudden or severe headache, confusion, or problems with vision, speech, or walking. These could be signs of stroke

If you notice these less serious side effects, talk with your health care provider:

- Mild skin rash or itching.
- Muscle spasms.
Apixaban
*(brand name: Eliquis)*
Apixaban is used to help prevent blood clots from forming, which reduces the risk of stroke in people with A-Fib.

**How To Use This Medicine**
Take apixaban twice a day, with or without food. If you miss a dose, take it as soon as you can. If it is almost time for your next dose, wait until then to take it and skip the missed dose. Do not take two doses at the same time. If you accidently take too much, call your health care provider right away, or go to the nearest emergency room.

**Possible Side Effects**
Apixaban can cause bleeding that can be serious.
Call your health care provider right away if you notice any of these side effects:
• Allergic reaction: itching or hives, swelling in your face or hands, swelling or tingling in your mouth or throat, wheezing, trouble breathing
• Tingling or numbness in your legs, especially if you had a procedure where a needle was inserted into your spinal column
• Any unexpected bleeding or bleeding that lasts a long time, such as unusual bleeding from your gums, nose bleeds that happen often, or menstrual bleeding that is heavier than normal
• Bleeding that you cannot control
• Red, pink or brown urine
• Bloody or black, tarry stools
• Coughing up blood
• Vomiting blood, or vomit that looks like coffee grounds
• Sudden or severe headache, confusion, or problems with vision, speech or walking. These could be signs of stroke

**Important Information**
Do not stop taking apixaban without talking to your health care provider, as this could increase your risk of having a stroke. If you have to stop taking it, your health care provider may give you a different blood thinner instead. Be sure to refill your prescription before you run out.

Tell your health care provider if you are planning to have any surgery, or medical or dental procedure because you may have to stop taking apixaban for a short time. You may bleed and bruise more easily, and it may take longer for bleeding to stop while you are taking this medicine. Be careful to avoid injuries.

**Possible Drug Interactions**
You may have a higher risk of bleeding if you take apixaban with other medicines that thin the blood, including warfarin/Coumadin, clopidogrel/Plavix, prasugrel/Effient or ticagrelor/Brilinta, as well as aspirin or pain medicines such as ibuprofen or naproxen. Also, some medicines may affect the way apixaban works, including some antibiotics, antiviral medicines and seizure medicines. It is very important for you to tell your health care provider about ALL medicines (including vitamins and over-the-counter medicines) you are taking BEFORE you start taking apixaban, and talk to them before taking any NEW medicines while taking apixaban.