

**Kelsey-Seybold Clinic**  
**Centralized Pharmacy Anticoagulation Service (CPAS)**  
*(also known as the “Coumadin Clinic” or “Warfarin Clinic” or “Anticoagulation Clinic”)*

**Monday – Friday | 8:30 am to 5:30 pm**  
**Phone 713-442-6240 | Fax 713-442-2735**

**Warfarin**  
**Patient Education Booklet**

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## 1. Why am I taking Warfarin?

- Warfarin, which is also known as Coumadin or Jantoven, is an anticoagulant and prevents dangerous clots from forming.
- Warfarin is prescribed for patients who are at an increased risk for developing harmful blood clots or those who have already developed a harmful blood clot. Clots that form in your arms, legs, lungs, heart, or brain can cause strokes, heart attacks, or other life-threatening events.
- **Conditions where Warfarin may be prescribed includes, but is not limited to patients with:**
  - Abnormal heart rhythm (atrial fibrillation or “afib”)
  - Clotting disorders
  - Mechanical heart valves
  - Clot in leg (deep vein thrombosis or DVT)
  - Clot in lungs (pulmonary embolism or PE)
  - Previous stroke or heart attack

## 2. How does Warfarin work to prevent clots?

- Blood clots form naturally in your body to help prevent blood loss if you get a cut. Vitamin K, which can be found in our diet and over the counter products such as multivitamins and supplements, works in the liver to make clotting factors which are involved in a complex process to help the blood clot and prevent bleeding.
- While Warfarin is sometimes called a "blood thinner," it does not actually thin the blood. Warfarin makes it so that blood clots take longer to form. **Warfarin works against vitamin K and blocks the production of clotting factors.** This leads to a decreased ability for the blood to clot.
- When you first start Warfarin, it will begin to decrease the production of clotting factors 24 hours after the first dose. However, it can take up to 5 days to see the full effect of your Warfarin. Warfarin does not dissolve clots, but it keeps them from increasing in size and from moving to another part of the body and reduces the chances of developing new clots.

## 3. How should I take my Warfarin?

- **Warfarin can be taken with or without food. It can be taken at the same time along with most medications.** There are only a few medications that need to be separated from your Warfarin. If you are unsure whether a medication will interact with your Warfarin, please call the clinic for more information.
- **Take your dose in the evening at the same time everyday.** Taking your dose at night will make it easier for the clinic staff to adjust your Warfarin dose the day of or the day after your lab work is done. Taking your dose at the same time every day will help you remember to take your dose and keep the amount of blood thinner in your bloodstream steady.

- **Always take your pills as directed by the Warfarin Clinic.** The amount of Warfarin you take may change depending on your blood work. Keep an updated record of dosing instructions provided by the clinic staff in an easy to find area (example: refrigerator door, diary, planner). Throw away any old instructions when new dosing instructions are given to avoid confusion. If you are unsure if your dosing schedule has changed, please call the Warfarin Clinic for instructions. A weekly pillbox may also be useful in helping you keep track of your dose.
- **Never skip doses and never take double doses.** Taking more pills than directed can cause your blood to be too “thin” and increase your risk of bleeding. Missing doses can make your blood too “thick” and increase your risk of developing a life-threatening blood clot.
  - If you miss a dose, take it as soon as you remember on the same day.
  - If you do not remember until the next day, please call the anticoagulation clinic for instructions.
  - If the clinic is closed over a weekend or holiday, skip the missed dose, and start again the next day. Be sure to mark the missing dose in a diary and let the clinic staff know.

#### 4. What are some methods I can use to help me take Warfarin as directed?

- Use a weekly **pillbox** to help you keep track of your doses.
- Use a **journal or calendar** to document your regimen, dose adjustments, missed doses, and changes in diet or lifestyle.

Example

July 2023						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2 1/2 TAB	3 1 TAB Check INR INR: 3.6	4 Hold Dose	5 1 TAB	6 1/2 TAB	7 1 TAB	8 1/2 TAB
9 1/2 TAB	10 1 TAB	11 1/2 TAB Check INR INR: 2.7	12 1 TAB	12 1/2 TAB	14 1 TAB	15 1/2 TAB
16 1/2 TAB	17 1 TAB	18 1/2 TAB	19 1 TAB	20 1/2 TAB	21 MISSED MY DOSE	22 1/2 TAB
23 1/2 TAB	24 1 TAB TYLENOL	25 1/2 TAB TYLENOL	26 1 TAB TYLENOL	27 1/2 TAB Check INR	28 1 TAB	29 1/2 TAB
30 1/2 TAB	31 1 TAB					

## 5. Why are Warfarin Tablets color-coded?

- Warfarin tablets are color-coded for your safety to help prevent medication errors.
- **Warfarin tablets come in different colors and each COLOR corresponds to a specific STRENGTH.** The shape and the imprints may vary, but regardless of the manufacturer, the warfarin color will remain the same for each tablet strength.

Example:



## 6. How do I know if my Warfarin is working?

- **As long as you are taking warfarin, you will need to have routine lab tests.** A simple blood test is done by the lab called an INR. This test can be done at any Kelsey-Seybold Clinic lab location. You do not need an appointment and do not need to be fasting or this lab. There are two methods for lab tests: finger stick or vein draw. You may choose either one, but we recommend you use the same INR test every visit for consistency.
- Your INR is used by the clinic staff to determine how fast your blood clots and if your warfarin dose needs to be adjusted to prevent clotting or bleeding complications.
- **You will have a special INR target range determined by your doctor.** Staying in this range prevents your blood from being too “thick” or too “thin.”
  - a. An INR that is too low means your blood will clot faster, which may increase the risks for clot.
  - b. An INR that is too high means your blood will clot slower, which may increase the risks for bleeding.
- **The clinic staff will determine how long you should wait between lab work.** Depending on how much your INR changes, you may need to have lab work done as often as weekly or as infrequently as every 4 weeks. Patients who have very stable INR labs and have not had any out-of-range INRs or dose adjustments for over 6 months may have their INR labs extended up to 6 to 8 weeks.
- You are responsible for getting your blood drawn on time. If you have concerns regarding transportation to and from labs or cannot make it to the lab by a scheduled day because of medical reasons, please call the clinic right away. If you will be traveling when your next INR is due, please call the clinic for further instructions. The clinic staff can assist you with how to get your lab work done outside of the Kelsey-Seybold Clinics.

## 7. What are some possible side effects?

- **Some slight bleeding may be noticed from time to time:**
  - **Bleeding gums while brushing your teeth** – Use a soft bristle toothbrush to avoid significant bleeding from gums.
  - **Occasional nosebleed** – You may notice your facial tissues are tinged with a small amount of blood after blowing or rubbing your nose. If the nosebleed does not stop within a few minutes or facial tissues are saturated with blood, please call the clinic for further instructions.
  - **Easy bruising** – Small bruises may develop on arms and legs more easily than you are used to. If these bruises increase in size or you suddenly develop multiple bruises without known origin, contact the clinic staff.
  - **Bleeding after a minor cut that stops within a few minutes** – Because it is harder for your blood to clot while taking warfarin, cuts may take longer to stop bleeding. If you cut your arm or leg, keep the limb above heart level to decrease the bleeding. If the cut is very deep, covers a large area, or will not stop bleeding after 10 minutes, contact the clinic for further instructions or call 911. Be sure to tell any emergency personnel you are taking warfarin.
  - **Menstrual bleeding that is heavier than normal**

## 8. What are signs of bleeding I should look out for?

- **The following are indications of major bleeding. If you see any of the following, you should call your doctor or go to the emergency room right away. Be sure to tell any emergency personnel you are taking warfarin.**
  - Blood in urine
  - Black, tarry stool
  - Coffee ground-like vomit
  - Nose and gum bleeding that does not stop after applying pressure
  - Severe pain, like a headache or stomach-ache
  - Sudden appearance of bruises for no reason that increase in size
  - Menstrual bleeding that is much heavier than normal
  - A cut that bleeds for more than 10 minutes
  - A serious fall or hit on the head
  - Dizziness or weakness

## 9. What are some Safety Tips to avoid bleeding?

- **Use caution with items like knives, scissors, and razors that could cut you** – While in the kitchen be careful when using knives or other sharp kitchen utensils. If using a razor to shave your face or legs, an electric razor or a razor with a blade guard is safer than using a straight blade. A cut on your face or leg could add unnecessary time and hassle to your routine. It may increase the time it takes for you to get ready for work in the morning and could stain clothing.

- **Avoid involvement in risky sporting/outdoors activities** – Exercise is an important and necessary part of your health, but some physical activities that put you at risk for bruising or bleeding could be dangerous while you are taking warfarin. Consider the activities that you currently participate in:
  - **Do they put me at unnecessary risk for injury?** Is it a contact sport where you could fall, hit my head, or cut or bruise yourself? If so, another activity may be safer.
  - **Can I wear protective gear while I participate?** For example, if you like to ride your bike, be sure to wear a helmet, elbow and knee pads, and gloves to protect yourself from a fall. When working in the yard or garden be sure and wear clothing that protects your hands, arms, and legs from cuts and scrapes (long sleeves, long pants, gloves and closed-toed shoes).
- **Wear a medical alert bracelet** – This allows first responders and other health care professionals to determine you are on warfarin if you sustain an injury and are unconscious or unable to give your medical history and medications. Since warfarin increases your risk of bleeding, it is important that they know you are on a blood thinner in case you need an emergency surgery or procedure.
- **Call your doctor or go to the hospital if you suffer a bad fall, even if you are not bleeding** – Even if you are not bleeding on the outside, your fall could have caused some bleeding on the inside that you can't see. Only your doctor will be able to do tests to determine if your injury caused hidden bleeding.

## 10. What are signs of clotting I should look out for?

- **If any of the following symptoms occur, go to the hospital, or call 911 immediately.** Knowing the symptoms of a blood clot is the most important step in treating it when it occurs. Often people do not know or recognize the symptoms, but think they are having ordinary leg pain or a cramp. When a blood clot forms, it can partially or completely block the blood flow in the vein. This is what causes the symptoms.
- **Clot in your leg**
  - Swelling, tenderness, redness, or pain in leg muscles
  - Dull, aching throb in the calves, especially when walking
  - Your leg becomes really hot or really cold
- **Clot in your lungs**
  - You feel short of breath all of a sudden and can't catch your breath
  - Chest pain
  - Rapid heartbeat
  - Feelings of doom or dread
- **Clot in your brain (aka stroke) – remember the FAST acronym**
  - Facial droop or uneven smile
  - Arm weakness
  - Slurred speech
  - Time is critical

## 11. Will other medications interact with Warfarin?

- Warfarin can change the way other medications work. Other medications can also change the way your warfarin works. That is why it is **EXTREMELY IMPORTANT** to tell your doctors, pharmacists, and the Warfarin Clinic about all the medications you are taking, even over-the-counter (OTC) and herbal medications.
- **Provide the Warfarin Clinic with a record of current medications (including all prescription, OTC, and herbal medications) from all doctor's appointments. Always tell the Warfarin Clinic when you start taking a new medication, or if a current medication is changed or stopped.**
- **Any product containing aspirin may decrease your body's ability to form clots.** If you take a daily aspirin for a medical condition, please talk to your doctor about whether you should continue your aspirin while taking Warfarin and what dose of aspirin you should take.
- **Antibiotics may increase your risk of bleeding while on Warfarin.** Some antibiotics interfere with Warfarin more than others. Let all healthcare providers know you are taking Warfarin if antibiotics are required for treatment of an infection. Please call the Warfarin Clinic and provide the name of the antibiotic, the dose, and how long you will be taking it so we can adjust your Warfarin dose.
- **Pain relievers may increase your risk of bleeding while on Warfarin.** Tylenol is the recommended over the counter pain treatment for patients on Warfarin, but it should be taken in lower doses. If you experience worsening pain or non-improving pain while taking low dose Tylenol, please contact the Warfarin Clinic or your doctor's office to discuss other pain management options. The following medications should be approved for use by your doctor before you start them:
  - Aspirin (Bayer, St. Joseph)
  - Excedrin
  - High dose Acetaminophen (Tylenol)
  - Naproxen (Aleve)
  - Ibuprofen (Advil, Motrin, Nuprin, Midol, Pamprin HB)
- **Stomach remedies may increase your risk of bleeding while on Warfarin.** Let the clinic staff know if you start taking any of the following medications:
  - Cimetidine (Tagamet HB)
  - Bismuth Subsalicylate (Pepto Bismol)
  - Laxatives and stool softeners
  - Alka-Seltzer
  - Proton Pump Inhibitors (Protonix, Prilosec, Nexium, Prevacid, Aciphex, Dexilant)
- **Herbal medications may increase your risk of bleeding.** The following medications should be approved for use by your doctor before taking:
  - Garlic
  - Green Tea
  - Ginkgo
  - Fish Oil

- **Vitamin supplements that contain Vitamin K can decrease the effectiveness of your Warfarin.** Check the label of your vitamin bottle to determine if your multi-vitamin contains vitamin K. Vitamin K-free multi-vitamins are available in most grocery stores and pharmacies and will help ensure you get the most out of your Warfarin therapy.

## 12. How does my diet affect my Warfarin?

- **High amounts of Vitamin K in your diet can work against your Warfarin.** Vitamin K is found in green leafy vegetables, some fruits, meats, and oils. In large amounts, it decreases the effectiveness of Warfarin. A complete list of foods high in Vitamin K called the QAS Vitamin K registry is provided in your education packet. If you are unsure about a certain food or food type that is not listed, please call the clinic staff for clarification.
- **Do not make any major changes in your diet or start a weight loss program without calling the clinic staff.** Your dose will need to be adjusted if the amount of vitamin K foods you consume increases or decreases drastically.

Examples of Foods that contain high amounts of Vitamin K which may <u>lower</u> INR level:		
Fruits and vegetables		
<ul style="list-style-type: none"> <li>➤ Blackberries</li> <li>➤ Blueberries</li> <li>➤ Grapes</li> <li>➤ Kiwifruit</li> <li>➤ Prunes (dried)</li> </ul>	<ul style="list-style-type: none"> <li>➤ Asparagus</li> <li>➤ Broccoli</li> <li>➤ Brussels sprouts</li> <li>➤ Cabbage</li> <li>➤ Cauliflower</li> <li>➤ Collard</li> <li>➤ Endive</li> <li>➤ Green onions</li> </ul>	<ul style="list-style-type: none"> <li>➤ Kale</li> <li>➤ Lettuce</li> <li>➤ Mustard greens</li> <li>➤ Parsley</li> <li>➤ Peas</li> <li>➤ Spinach</li> <li>➤ Turnip</li> </ul>
Other Foods		
<ul style="list-style-type: none"> <li>➤ Beef or pork liver</li> <li>➤ Soybeans</li> <li>➤ Cashews</li> </ul>	<ul style="list-style-type: none"> <li>➤ Mayonnaise</li> <li>➤ Margarine</li> <li>➤ Canola Oil</li> <li>➤ Soybean Oil</li> </ul>	<ul style="list-style-type: none"> <li>➤ Boost</li> <li>➤ Ensure</li> <li>➤ Protein shakes</li> </ul>
<p><b>Because of the Vitamin K content of these foods, they must be eaten in moderation and consistently.</b></p> <p>Servings generally should be limited to 2 or 3 small portions (3 or 4 ounces) per week. Keeping a journal of when you eat foods high in vitamin K or planning for these foods on specific days of the week will help you keep track of how much vitamin K you are eating. Let the Warfarin clinic staff know if you eat more or less than usual vitamin K rich foods between your lab draws.</p>		

Examples of Foods that may <u>elevate</u> INR level:		
<ul style="list-style-type: none"> <li>➤ Alcohol</li> <li>➤ Cranberries – fruit or juice</li> </ul>	<ul style="list-style-type: none"> <li>➤ Grapefruit – fruit or juices</li> <li>➤ Mango – fruit or juices</li> </ul>	<ul style="list-style-type: none"> <li>➤ Papaya – fruit or juices</li> <li>➤ Pomegranate – fruit or juices</li> </ul>
<p><b><i>CPAS recommends avoiding these foods/drinks that can elevate INR due to the nature of the interaction with Warfarin. If you have consumed these items, please contact CPAS, as close monitoring of your INR may be needed.</i></b></p>		



### 13. Can I drink alcohol while taking Warfarin?

- **Limit your alcohol intake to 2 drinks per day in men and 1 drink per day in women.** Alcohol can affect your Warfarin dosage, but it doesn't mean you must avoid alcohol all together. Your bleeding risk increases when you drink more than 2 drinks per day (1 beer =1 glass of wine=1 cocktail/shot) and fluctuations in warfarin stability can occur if you change your usual pattern of alcohol. If you have more alcohol than usual, please call the Warfarin Clinic so we can better adjust your dose based on your normal alcohol intake.
- **Do not binge drink while taking Warfarin.** Binge drinking alcohol or drinking a large amount of alcohol in a short amount of time, is very dangerous when you are taking Warfarin “and can increase your risk of bleeding”. Use good judgment on special occasions and holidays and drink only what you would normally drink on any regular day.
- **If you fall or injure yourself while drinking and taking Warfarin, you are more likely to have a life-threatening bleeding event.** If you have a fall or injury while drinking alcohol, especially if you hit your head, call 911 or seek emergency care immediately. Even if you can't see a cut or bruise from the fall, you will need to be evaluated by a doctor for any signs of internal bleeding.

### 14. Can I take warfarin during Pregnancy or Breast-feeding?

- **Warfarin can cause birth defects.** If you become pregnant or think you may be pregnant while taking this medication, you should contact the clinic and your doctor immediately so your medication therapy can be changed. If you are planning a pregnancy, please discuss other drug therapy options with your doctor and let the clinic know when you become pregnant.
- **Talk to your doctor regarding restarting your Warfarin after your pregnancy.** A mother may be able to safely breastfeed while taking Warfarin, but this therapy must be cleared by the doctor first!

### 15. What do I do if I have to Travel?

- Whenever planning for travel or vacation, call the Warfarin Clinic to let us know. We can provide refills or external INR lab orders that you may need during your stay at your destination.
- It is always good practice to ensure you have enough Warfarin to last you through the entirety of your travel plans (and even a little extra in case of unexpected delays). If you are expected to run out of refills during your travels, let the Warfarin Clinic know and they can send additional refills.
- Additionally, remember to promote blood circulation during long flights or road trips by stretching your legs, walking around occasionally, and wearing compression socks.

### 16. What do I do if I have an upcoming procedure?

- Whenever a surgical procedure is planned, notify the Warfarin Clinic at least 2 weeks prior to the procedure date or as early as possible and always let your providers know that you are on Warfarin.

## **17. When should I expect a call from the Warfarin Clinic?**

- When the Warfarin Clinic receives your INR from the lab, you will get a follow-up call within 72 hours. They will instruct you of any adjustments on your Warfarin and when to do your next INR lab.
- An INR of 5 or greater is considered a critical INR value that requires urgent adjustments and follow up. For a critical INR, the Warfarin Clinic will follow up within 24 hours. If you do not hear from the Warfarin Clinic within this time frame, please check your MyKelseyOnline, your voicemails, and call the Warfarin Clinic as soon as possible.
- If you would like a representative to receive your follow up calls from the Warfarin Clinic on your behalf, you must either provide verbal consent at every call, or you and your designated representative can sign a one-time Release-of-Information (ROI) form and mail the form back to the Warfarin Clinic. The form and instructions on how to send it back are included in your education packet.

## **18. How do I contact the Warfarin Clinic?**

- **Please do not hesitate to contact us with any questions or concerns that you have regarding your Warfarin, blood work, or other factors that affect your therapy.**
- **The Warfarin Clinic staff is available Monday – Friday, 8:30 am to 5:30 pm at 713-442-6240.**
- **If it is after hours and you have an urgent, non-life-threatening medical concern that you need assistance with, you can contact the Kelsey Seybold 24/7 Nurse Triage Line at 713-442-0000. If you're having a medical emergency, please call 911.**