

## INTRODUCTION

The information contained in this booklet is to help you understand and achieve the optimal benefit from your Warfarin (also referred to as "Coumadin"). Warfarin therapy is a collaborative effort between you, your physician and the Anticoagulation (AntiCoag) Service. **YOU** play a critical role in ensuring that your therapy is successful!!

The AntiCoag Service is committed to providing professional pharmaceutical care and excellent service. Please feel free to call us with any questions or concerns.

## WHAT IS WARFARIN?



Warfarin is a medication that slows the blood clotting process. It is used in individuals who have recently formed a blood clot, or, are at risk for forming them.

## WHY DO I NEED WARFARIN?

- Used to decrease the risk of blood clots from being formed by diseased or artificial heart valves or by irregular heart beats (atrial fibrillation).
- Treats existing blood clots (often found in the leg, the lungs, the heart, or the brain). **It does not dissolve blood clots directly.** Warfarin decreases the risk of blood clots already formed from getting larger.

## HOW DO I TAKE WARFARIN?



- May be taken with or without food.
- Write your dosing instructions in the warfarin calendar provided.
- Count out your tablets for the week and keep them separated in a tablet organizer.
- Take exactly as you were instructed. Please call us if you are unsure of the dosage
- Take the tablet at the same time every day, preferably in the evening. If you miss the time you have scheduled for your Warfarin dose, you may take your Warfarin at a later time provided it is **within twelve (12) hours** of your scheduled time. **If more than 12 hours have elapsed, do NOT take your Warfarin dose.**
- If you miss more than 2 doses, contact and inform the AntiCoag Service so that the pharmacist can determine the best course of action.
- **Notify the AntiCoag Service and your physician immediately if you become or intend to become pregnant.**
- **You should NOT stop your Warfarin therapy on your own.** Your physician will advise when it is appropriate to start or stop your Warfarin. Please notify the AntiCoag Service if a physician has instructed you to stop your Warfarin or if any dosing changes were made.

## WHY DO I NEED BLOOD TESTS?



- Your test is called a **protime**. The **result** is called an **INR**.
- Blood tests determine the effect of Warfarin on your blood. Your lab results will determine whether or not you need to take more or less of Warfarin.

- The AntiCoag staff will adjust your Warfarin dose based on your INR result to keep you within your specific INR range.

## HOW OFTEN DO I TAKE BLOOD TESTS (PROTIME)?

- Lab tests will be done periodically and could be daily, weekly, or monthly depending on your results. **The maximum interval is six (6) weeks.**
- Please go to the Kaiser Permanente laboratory that is most convenient for you for your Protime/INR tests. **You do NOT come to the Anticoag office for your lab draws.**
- You **DO NOT** need to fast before blood tests.
- **The AntiCoag Service will notify you of your INR results and your next test date via phone and/or mail within a few days.** *If you do not hear from the AntiCoag Service within 1 week of your lab test, please call us.*
- Please remember that it is **YOUR** responsibility to make your scheduled lab test date, or to notify the AntiCoag service if you are unable to do so. If you do not come in for your scheduled lab date, it is our responsibility to document in your medical chart and to inform your physician that the scheduled lab visit was missed. Also, all attempts to notify you either by phone or mail are documented in your medical records.
- **Your compliance in testing, dosing and communication with our service are critical factors in the success of your Warfarin therapy.**

## WHAT CAN CHANGE MY BLOOD TEST (PROTIME) RESULTS?

- ◆ Drastic changes in diet
- ◆ Alcohol consumption
- ◆ Illness/changes in your health condition
- ◆ Medication changes/drug interactions
- ◆ Lifestyle or activity level changes
- ◆ Travel

\*\*Call the AntiCoag Service as soon as possible if there are changes to any of the above factors (see below for more detailed information)

### DIET



Some foods can alter your response to the anticoagulant. It is very important to remain on the same type of diet you were on when the anticoagulant was first prescribed.

Your dose of Warfarin is prescribed to accommodate your normal intake of Vitamin K. Vitamin K plays a role in the formation of blood clots; a high intake of this vitamin can decrease the effectiveness of Warfarin. **Avoid any MAJOR changes in eating foods that contain a large amount of Vitamin K such as leafy green vegetables, salads and soy products.**

Call your physician or pharmacist if you are unable to eat for several days or if you have continuing diarrhea or fever.

Please see the chart (next page) to help you with your dietary choices.

## Dietary Guidelines for Vitamin K and Warfarin (Coumadin)


### Vitamin K Content of Foods

LOW Vitamin K Foods	MEDIUM to HIGH Vitamin K Foods	
Artichoke	Algae	Mint leaf
Asparagus	Avocado	Mustard greens
Banana	Amaranth leaf	Natto (fermented soybean)
Beans	Broccoli	Nightshade leaf
Beets	Brussel sprouts	Okra
Carrots	Cabbage	Olive oil
Cauliflower	Canola Oil	Parsley
Celery	Chayote	Purslane
Cilantro	Chives	Seaweed
Corn	Coleslaw	Soybean oil
Eggplant	Collard greens	Soybeans
Green Beans	Coriander leaf	Spinach
Green peppers	Endive	Swiss chard
Mushrooms	Fish packed in oil	Tea from Tonka beans
Onion	Garbanzo beans	Toumayo
Parsnip	Green cabbage	Turnip greens
Peas	Green tea	Tziton
Peeled cucumber	Kale	Vegetable drinks (V8)
Potato	Kiwi	Watercress
Pumpkin	Lentils	Wheat grass powder
Radish	Lettuce	
Red Cabbage	Liver	<i>Limit salad oil, canola oil and soybean oil to 2 tablespoons per day.</i>
Summer Squash	Mayonnaise	
Sweet potato		
Tomato		
Turnips		

- Notify the AntiCoag service if you consume canned/liquid food supplements such as **Ensure, Glucerna, Boost, Viactiv Calcium Supplements and Carnation instant breakfast** as they contain vitamin K.
- **Food generally low in Vitamin K include starches and breads, fruits, dairy products, meat, fish, poultry, nuts, tofu, fats and sugar.**
- It is important to be **consistent** with Vitamin K intake rather than avoid Vitamin K. Try not to change amounts of high Vitamin K food eaten on a week to week basis. If you do, you need to speak to your AntiCoag pharmacist about adjusting your medication.

### ALCOHOL CONSUMPTION



**Alcohol intake puts you at significant risk for injury and potential bleeding complications while taking Warfarin.** Please notify the Anticoag staff if you consume more than 1 (one) drink per day. 1 drink means 12 oz of beer, or 4 oz of wine,  of hard liquor.

## ILLNESS/CHANGES IN YOUR HEALTH CONDITION

If you experience any of the below **for more than 24 hours**, please contact the AntiCoag staff:

- Congestive heart failure, retaining fluid/swelling
- Fever (over 101 °F)
- Flu
- Decreased appetite
- Viral or bacterial infection
- Diarrhea, vomiting

These above conditions can cause Warfarin to accumulate in your body and may increase your risk of bleeding.

**Remember also to call the AntiCoag service if you begin taking antibiotics for any reason. Your Warfarin dosage may need to be adjusted.**

## MEDICATION CHANGES/ DRUG INTERACTIONS



Any medication, whether prescription *or* over-the-counter, can potentially affect your body's response to Warfarin. Some drugs increase your bleeding time (INR), while other drugs decrease your bleeding time (INR).

Please call the AntiCoag service for any possible drug interactions if you have any new medications or any changes to your current medications (prescription, vitamins, herbals, or over-the-counter).

**DO NOT TAKE** aspirin-containing products or NSAIDS (eg. Motrin/Ibuprofen, Naprosyn, Aleve, Advil, Pepto Bismol) unless directed by your physician. Please notify the AntiCoag service if you are taking any aspirin or NSAID.

The only over-the-counter (non-prescription) medication you may take for pain without notifying the AntiCoag service is Tylenol (acetaminophen) – notify us if you are taking more than 2000 mg a day.

## LIFESTYLE/ACTIVITY LEVEL



Oral anticoagulant therapy should not prevent you from leading a normal, healthy lifestyle. Patients taking anticoagulant medication can continue physical activities that are usually safe, such as walking, jogging, swimming and gardening. These and other exercises are beneficial because they promote good blood circulation. However, patients should avoid body-contact

sports and other activities in which injuries are more likely to occur. Discuss with your physician whether your current physical activities are safe enough to continue.

## TRAVEL



It is all right to travel if you remember to:

- Take an adequate supply of medication.
- Take the medication as close to the same time each day as possible.
- Maintain a consistent diet.
- Have your lab tests done before you leave. If necessary, go to a Kaiser facility located near where you are staying. Inform the AntiCoag Service on your contact information. **If you have your lab test done at a non-Kaiser lab, Kaiser will not reimburse the lab cost.**
- If you are traveling and have to sit for a long period of time, try to stretch your legs every 1-2 hours.
- If you plan a long trip away from home, tell the AntiCoag Service as soon as possible, especially if you will miss an appointment or a lab test.

## SIDE EFFECTS



Some risk is involved in taking this medication because of its effect on clotting. However, the risk is relatively small when it is taken properly with appropriate monitoring and adjustment. Cooperation is required between the patient, the physician and the AntiCoag team to achieve the desired results.

**Bleeding** is the major side effect of too much Warfarin.

**Clotting** is the major side of effect of too little Warfarin.

Warfarin will **NOT** make you drowsy, tired, fatigued, change your blood pressure or blood sugar, make your mouth dry, increase your heart rate, or cause memory loss.

The following are **common** bleeding symptoms that may occur.



- Gum bleeding while brushing teeth
- Occasional nosebleed (less than 10-15 minutes)
- Small bruises
- Prolonged bleeding after minor cuts (less than 20 minutes)
- Prolonged menstrual bleeding

The following are **SERIOUS WARNING SIGNS OF BLEEDING**



Go to [Urgent Care/Minor Injury or Illness Center or the Emergency Department](#) for evaluation.

### **Major Bleeding:**

- Severe and prolonged headaches, stomach pain or back pain
- Coughing up blood
- Swelling and tenderness or pain in your abdomen
- Vomiting red blood or material that looks like coffee grounds
- Bowel movements that are black, tarry-colored or contain blood
- Urine that contains red blood or that is dark brown
- Severe bleeding into whites of eyes (*contact your ophthalmologist*)
- Any bleeding that continues or is of excessive amount
- A fall or blow to the head (*even if you do not lose consciousness or have a headache*) needs to be reported promptly to your physician
- Prolonged and excessive menstrual bleeding (SOAKING through a pad every 15 minutes for 1 hour, go to the Emergency Room. Call for an OB/GYN appointment if SOAKING through a pad every 1 hour for 4 hours).

The following are **WARNING SIGNS OF BLOOD CLOTS**



Go to [Urgent Care or the Emergency Department](#) immediately:

- Sudden weakness or numbness of the face, arm or leg on one side of the body
- Sudden onset of slurred speech or inability to speak
- Visual changes or loss of sight in either eye
- Sudden, severe headache with no known cause
- Any fainting or loss of consciousness
- Severe pain or swelling in an extremity
- Shortness of breath or chest pain with no known cause

## **PREGNANCY**

**Pregnant women CANNOT take Warfarin.** Warfarin causes birth defects to the developing fetus. If you are, or are planning to become pregnant, please notify your physician. For women who must be anticoagulated during pregnancy, there are safe options.

## **DOCTOR OR DENTAL APPOINTMENTS**



- Tell **all** health care providers that you are taking Warfarin.
- Some people (e.g. artificial heart valve patients) will need antibiotics before medical or dental procedures, even for such minor procedures as teeth cleaning.
- **Your Primary Care Physician and/or the physician doing a procedure will make the determination whether/when to stop your Warfarin in preparation for a procedure and when to restart your Warfarin after a procedure. The AntiCoag Service is not authorized to start or stop your Warfarin, only to make dosing adjustments. Please phone the AntiCoag Service at least 1 to 2 weeks in advance so we may coordinate your warfarin plan with your other physicians.**

## **IMPORTANT REMINDERS/PATIENT RESPONSIBILITIES:**



- Inform **ALL** medical and dental personnel that you are taking Warfarin.
- If there is **ANY** change in the warfarin tablet color after a refill, alert the pharmacist immediately.
- Inform your physician immediately if you are, or are planning, to become pregnant.
- **DO NOT** take aspirin or aspirin-containing products unless instructed by your M.D.
- When starting or stopping **ANY** medications (prescription, over-the-counter, antibiotics, vitamins, herbals) inform the AntiCoag Service.
- **DO NOT STOP** warfarin on your own.
- Take your Warfarin at the same time each day; do not miss doses and do not double-up on any dose unless instructed to do so by your AntiCoag pharmacist.
- Have your protime tested regularly as scheduled; inform the AntiCoag Service as soon as possible, if you are unable to make a scheduled lab visit.
- Inform the AntiCoag Service of any extended trip that might influence your medication availability, scheduled protime tests and eating habits.
- **Limit alcohol**
- Maintain a **CONSISTENT** dietary intake of Vitamin K.
- Call in prescription refills at least one week before running out
- Avoid placing yourself at risk for injury. Wear shoes; wear gloves for woodworking, gardening, etc; use an electric razor to shave; use a soft-bristle toothbrush and waxed dental floss.
- Any change or worsening of your health condition, inform the AntiCoag Service.
- **ANY** Emergency Room visit, hospital discharge or any upcoming medical or dental procedure, inform the AntiCoag Service.
- If your telephone number changes, you are planning to move, or if your health plan insurance changes, inform the AntiCoag Service.
- **If you have not been notified within 1 week after your protime test, inform the AntiCoag Service.**
- If a physician makes **ANY** changes to your Warfarin dosing, **OR** has instructed you to stop your Warfarin in preparation for a procedure, inform the AntiCoag Service.

- Wear a Medic-Alert identification bracelet or necklace indicating that you are on Warfarin; carry a completed Medic-Alert history card in your wallet.
- ⇒ **Read, sign and return** all required documents found in your packet to the **AntiCoag Service within two weeks of enrollment.**

## GLOSSARY

Below are terms you may come across in regards to your AntiCoag therapy.

### **Anticoagulant**

A drug or substance that impairs blood coagulation.

### **Atrial Fibrillation (AF/Afib)**

Irregular, rapid contractions of the atrium (one of the four heart chambers).

### **Coagulation**

The process of blood clotting.

### **Cerebral Vascular Accident (CVA)**

Commonly known as a "stroke." CVA's may be caused by:

- 1) Insufficient blood flow to the brain
- 2) Blockage of blood flow due to a clot
- 3) Bleeding into the brain
- 4) Malformed blood vessels

### **Deep Vein Thrombosis (DVT)**

Formation of blood clots in the deep veins of the leg.

### **Hematoma**

A localized collection of blood, usually clotted, in an organ, space or tissue, due to a break in the wall of the blood vessel.

### **INR (International Normalized Ratio)**

A standardized interpretation of the prothrombin time (PT) to correct for inter-laboratory variability in PT test results.

### **Myocardial Infarction (MI)**

Damage to the heart muscle (myocardium) as a result of interruption of the blood supply to the area, as in coronary thrombosis.

### **Prothrombin Time (PT or "protime")**

A laboratory blood test used to determine the time (in seconds) for clotting to occur, and to judge the effect of Warfarin, but not heparin.

### **Pulmonary Embolism (PE)**

A condition in which a blood clot lodges in a blood vessel in the lungs and may be a complication of deep vein thrombosis

### **Thromboembolism**

The blocking of a blood vessel by a blood clot that has become detached from its site of formation.





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