Warfarin
(Coumadin, Jantoven)

What is warfarin?
Warfarin is an anticoagulant. “Anti” means against and “coagulant” refers to blood clotting. An anticoagulant is a medicine that prevents blood clots from forming inside your child’s arteries, veins or heart.

Blood clots are clumps of blood cells that stick together. The purpose of blood clots is to stop the bleeding that is the result of an injury, for example, from a cut. Blood clots may cause problems if they form inside blood vessels or on artificial valves.

Warfarin is the generic name and Coumadin and Jantoven are brand names of the same medicine. Generic medicines usually cost less but work the same.

How does warfarin work?
Although it is often called a “blood thinner,” warfarin does not actually thin the blood. It makes the blood take longer to clot. This means that your child will bleed longer than usual after a cut or scrape.

What tests does my child need?
Your doctor determines the amount of warfarin for your child based on their heart condition and medical history. When your child first starts warfarin, they will need to give blood samples from a vein 2 to 3 times per week.

The blood test is called a PT (prothrombin time). The doctor also gets an INR (international normalized ratio) result. This compares your child’s PT to the average PT for people not taking warfarin. The tests measure the amount of time it takes for your child’s blood to clot.

The test is used to make sure that your child is getting the right amount of medicine. Once your child’s warfarin dose is stable, the INR checks will change to 1 to 2 times per month.

Where can my child have their INR checked?
INR checks can be done at many labs. Several local labs can check your child’s INR using a finger poke, including:

• Seattle Children’s 206-987-2102
• Evergreen Hospital 425-899-2783
• Overlake Hospital 425-688-5700
• Providence Hospital in Everett 425-258-7340

Your lab will need new orders every 6 or 12 months. Please contact the Anticoagulation Service if your lab needs a new order.
Some patients may be able to use a machine at home to check their INR. We have included an information flyer about home monitoring in your warfarin folder. If you are interested, ask the Anticoagulation Service if finger-poke INR tests are right for your child. To find out if your insurance will cover this machine at home, call your insurance company.

**What if the brand of my child’s medicine changes?**
Changing brands of medicine may change your child’s INR. If you refill your prescription and your tablets look different, please call the Anticoagulation Service. An INR check may need to be done.

**What medicines should my child avoid?**
Many medicines and herbs change how warfarin affects your child’s blood clotting. Use medicines only if recommended by your health care provider. Before starting any new medicine or herbal supplement when taking warfarin, also call the Anticoagulation Service. Always carry an updated list of your child’s medicines.

**Avoid these medicines:**
- Aleve (Naproxen)
- Aspirin (unless specifically prescribed by your doctor)
- Corticosteroids
- Ibuprofen (Motrin, Advil, other brands)
- Over-the-counter medicine for the stomach, including PeptoBismol, ranitidine (Zantac), cimetidine or omeprazole (Prilosec)
- Weight-loss medicine orlistat (Xenical, Alli) and food additive olestra
- Birth control containing estrogen or progestin
- Topical acne products (containing salicylic acid)
- Tylenol (acetaminophen). If you begin giving your child Tylenol on a daily basis for more than 1 week, please call the Anticoagulation Service for advice. An INR check may need to be done.
- Many antibiotics. If your child needs antibiotics for an infection, please call the Anticoagulation Service. We will need to increase the number of INR checks.
- Herbal medicines, like:
  - St John’s Wort
  - Ginseng
  - Coenzyme Q10
  - Cranberry
  - Gingko biloba
  - Chondroitin with glucosamine
  - Garlic
  - Soybean
  - Vitamin E

Other herbal medicines or supplements may not mix well with warfarin. Talk to your child’s doctor or the Anticoagulation Service before using any herbal or natural products.

Avoid giving vitamins K, A, D, E and C supplements beyond the daily recommendation unless your child’s doctor advises it. It is OK to give your child a daily multi-vitamin if the DV (daily value) or USRDA (United States Recommended Daily Allowance) for these vitamins is not greater than 100%.
Warfarin and Your Child’s Diet

How do foods affect my child’s warfarin?

A larger intake of vitamin K than usual in your child’s diet may cause warfarin not to work as well.

If your child’s diet changes to include more foods that are rich in vitamin K, this may increase the chance of a blood clot. However, if your child’s diet changes and includes less vitamin K, this may increase the chance of bleeding.

What foods are moderate to high in vitamin K?

Foods that are moderate to high in vitamin K include green vegetables like:

- Asparagus
- Lettuce
- Endive
- Avocado
- Mustard greens
- Watercress
- Broccoli
- Parsley
- Green scallion
- Brussel sprouts
- Peas
- Pickles
- Cabbage
- Spinach
- Kale
- Collard greens
- Turnip greens

What other foods affect warfarin?

Fish oil, mango, grapefruit juice, cranberry juice and Mexican vanilla can increase warfarin’s effect. Soy milk and sushi with seaweed can decrease warfarin’s effect. Let your child’s doctor know if they are eating or drinking large amounts of any of these foods or drinks.

What do I need to know about feeding my child?

Follow these nutrition guidelines when giving warfarin to your child:

- **Be sure your child gets the same amount of vitamin K each day.** Estimate the amount of high vitamin K vegetables your child eats each day. If your child normally eats 1 cup of green leafy vegetable at dinner, encourage your child to eat the same amount each day. You do not need to limit or stop giving your child green leafy vegetables. You just need to keep the amount the same.

- **If your child begins to change from their usual eating pattern or seems to not follow these recommendations, talk to your child’s doctor or dietitian.** We may need to keep a closer watch on your child’s INR.

Please call your dietitian if you have any questions about these nutrition guidelines while your child is taking warfarin.
Giving Your Child Warfarin

How do I give warfarin to my child?

- Warfarin comes only in pill form. It comes in many different strengths (see the picture below).
- Crush the pill and put it in applesauce or any other food your child likes.
- To give your child warfarin through a g-tube, crush the pill and mix it with warm water.
- Give it at the same time every day.
- It is usually given 1 time a day around 8 p.m. Talk to your child’s doctor about what is best for them.

<table>
<thead>
<tr>
<th>Strength</th>
<th>Coumadin</th>
<th>Jantoven</th>
<th>Strength</th>
<th>Coumadin</th>
<th>Jantoven</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mg</td>
<td>pink</td>
<td></td>
<td>5 mg</td>
<td>peach</td>
<td></td>
</tr>
<tr>
<td>2 mg</td>
<td>lavender</td>
<td></td>
<td>6 mg</td>
<td>teal</td>
<td></td>
</tr>
<tr>
<td>2.5 mg</td>
<td>green</td>
<td></td>
<td>7.5 mg</td>
<td>yellow</td>
<td></td>
</tr>
<tr>
<td>3 mg</td>
<td>tan</td>
<td></td>
<td>10 mg</td>
<td>white</td>
<td></td>
</tr>
<tr>
<td>4 mg</td>
<td>blue</td>
<td></td>
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</tbody>
</table>

This table shows the front and back of one warfarin tablet. There are different strengths of warfarin tablets. Each strength is a different color. Know the color that matches the strength of your child’s warfarin tablet.
What if we miss or forget a dose?

- If you forget to give a dose, never try to catch up or give 2 doses at the same time.
- Give your child the next dose at the normally scheduled time and call the Anticoagulation Service to report the missed dose.

If you do accidentally give an extra dose, please call the Anticoagulation Service for advice.

What if my child throws up after taking this medicine?

- If your child throws up after taking warfarin, do not give the dose again right away.
- Give the next dose at the regular time.
- Never give your child 2 doses at the same time.

What if we run out of medicine?

- Call your pharmacy when you are almost out of medicine. Your pharmacy will contact us about refills.
- It is always a good idea to call the pharmacy at least 48 hours before the prescription runs out to allow for time to contact your doctor.
- The clinic visit is the best time to make sure your child is getting the right dose and has enough medicine.
Keeping Your Child Safe While Taking Warfarin

Safety tips

Since this medicine causes your child to bleed more easily and longer than normal, safety is important. Follow these tips to prevent accidents:

- Always wear a helmet when bicycling, rollerblading or climbing.
- Wear a MedicAlert bracelet. This tells paramedics what medicine your child is taking. Ask your pharmacy or go to www.medicalert.org.
- Talk to your child’s doctor about high impact (contact) and high speed sports and activities to avoid.
- Always tell your child’s other healthcare providers and school that your child is taking warfarin.

How can my child maintain healthy bones?

Taking warfarin for a long time can make your child’s bones more brittle. To keep the bones healthy, encourage your child to:

- Get plenty of calcium from foods and milk
- Do weight-bearing exercise such as jumping rope, basketball and dancing

When should I call the doctor?

While taking warfarin, your child may bleed easier and longer than usual. It is also common to have increased bruising around injection sites. Patients on enoxaparin may experience bleeding symptoms for different lengths of time, from a couple seconds to several minutes. **If your child is bleeding and it does not stop, call 911.**

Call the Anticoagulation Service (206-987-6262) or your child’s doctor right away if you see any of these signs:

- Increased amount of bruising – black and blue marks on the skin that grow (swell or spread)
- Bleeding more than usual when brushing teeth
- Bruising on head or stomach area (not related to injection site bruising)
- Injury or trauma to the head or stomach area, from falls or injuries
- More bleeding than usual with menstrual period
- Vaginal bleeding when not on her period
- Headache, dizziness or weakness
- Severe symptoms of bleeding:
  - Blood in vomit—red or coffee-grind like
  - Blood in urine—red or dark brown
To Learn More

- Anticoagulation Service 206-987-6262 or toll-free 1-866-987-2000
- Nutrition 206-987-4758
- Pediatric Cardiology of Alaska 907-339-1945
- Ask your child’s healthcare provider
- www.seattlechildrens.org

Blood in stool—red or black and tarry
Other bleeding that does not stop after applying pressure for 10 to 15 minutes
New or worsening symptoms of clotting
- Unusual pain
- Swelling

When should I call 911?

- If your child is bleeding heavily and it does not stop.
- New or worsening symptoms of clotting that may indicate stroke
  - Any sudden numbness or tingling in the face, hands, arms
  - Any sudden weakness on one side of the body
  - Any sudden changes in speech or vision
  - Shortness of breath
  - Chest pain

You also should call the Anticoagulation Service:

- If your child is ill or starting a new medicine.
- You accidentally give your child an extra dose of the medicine
- One week before they have any invasive procedures such as tooth extraction (removal), surgery or invasive dental work. Your child may need a change in their medicine plan.

Scheduling a Teaching Appointment

The Anticoagulation Service pharmacist will review this information with you in a special teaching appointment. This is usually part of your child’s inpatient stay at Seattle Children’s. If you are discharged over the weekend, holiday or evening and have not received teaching about Enoxaparin from the Anticoagulation Service pharmacist, the Anticoagulation Service team will contact you the next business day. If you are not contacted the first business day after your discharge, please call 206-987-6262 to set up an appointment with the Anticoagulation Service.
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Your child’s diagnosis

Goal INR range

Local lab

Notes