

**Drug Information Table**  
**Anticoagulants – warfarin (Coumadin)**

Therapeutic Use	Administration	
<ul style="list-style-type: none"> <li>• Prevention of venous thrombosis, pulmonary embolism, during atrial fibrillation</li> <li>• Prevention of thromboembolism in patients who have prosthetic heart valves</li> <li>• Prevention of recurrent myocardial infarction and transient ischemic attacks</li> </ul>	<ul style="list-style-type: none"> <li>• Administer orally.</li> <li>• Measure baseline vital signs and prothrombin time (PT), reported as an international normalized ratio (INR).</li> <li>• Monitor INR; recommend reduced dosage for an INR above 2 to 3, depending on condition being treated, and an increased dosage for an INR below this range</li> <li>• Monitor PT/INR daily initially and eventually every 2 to 4 weeks.</li> <li>• Expect anticoagulant effects to take 8 to 12 hr, with the full therapeutic effect in 3 to 5 days.</li> <li>• Increase PT monitoring for patients who take drugs that interact with warfarin.</li> <li>• Tell patients to record the dosage, route, and time of warfarin administration on a daily basis.</li> <li>• Make sure patients watch for and report signs of bleeding (bruising, gums bleeding, abdominal pain, nosebleeds, coffee-ground emesis, tarry stools).</li> <li>• Tell them not to take over-the-counter NSAIDs, especially aspirin, or drugs containing salicylates.</li> <li>• Advise them to use an electric razor for shaving and a soft toothbrush.</li> </ul>	
Side/Adverse Effects	Interventions	Patient Instructions
<ul style="list-style-type: none"> <li>• Hemorrhage</li> </ul>	<ul style="list-style-type: none"> <li>• Monitor vital signs, checking for hypotension and tachycardia.</li> <li>• Check hematocrit and blood counts.</li> <li>• For warfarin overdose, stop the drug and administer vitamin K parenterally, usually IV.</li> </ul>	<ul style="list-style-type: none"> <li>• Stop taking the drug for signs of hemorrhage.</li> <li>• Report bruising, petechiae, hematomas, or black tarry stool immediately.</li> <li>• Wear medical identification indicating warfarin use.</li> <li>• Avoid excessive alcohol ingestion.</li> </ul>
<ul style="list-style-type: none"> <li>• Toxicity (overdose)</li> </ul>	<ul style="list-style-type: none"> <li>• Administer vitamin K to promote synthesis of coagulation factors VI, IX, X, and prothrombin.</li> <li>• Administer IV vitamin K slowly and in a diluted solution to prevent serious reactions.</li> <li>• Administer small doses of vitamin K (2.5 mg by mouth, 0.5 to 1 mg IV) to prevent development of resistance to warfarin.</li> <li>• If vitamin K cannot control bleeding, administer fresh frozen plasma or whole blood.</li> </ul>	<ul style="list-style-type: none"> <li>• Report bleeding immediately.</li> </ul>
Contraindications	Precautions	Interactions
<ul style="list-style-type: none"> <li>• Pregnancy risk category X</li> <li>• Vitamin K deficiency</li> <li>• Thrombocytopenia</li> <li>• Liver disease</li> <li>• Alcoholism</li> <li>• Uncontrollable bleeding</li> <li>• During lumbar puncture, regional anesthesia, or surgery that involves the brain, eyes, or spinal cord</li> <li>• Threatened spontaneous abortion</li> </ul>	<ul style="list-style-type: none"> <li>• Hemophilia</li> <li>• Increased capillary permeability</li> <li>• Dissecting aneurysm</li> <li>• Peptic ulcer disease</li> <li>• Severe hypertension</li> <li>• Severe hepatic or renal disease</li> </ul>	<ul style="list-style-type: none"> <li>• Heparin, aspirin, acetaminophen (Tylenol), glucocorticoids, sulfonamides, and parenteral cephalosporins increase anticoagulation.</li> <li>• Phenobarbital (Luminal), carbamazepine (Tegretol), phenytoin (Dilantin), oral contraceptives, and vitamin K decrease anticoagulation.</li> <li>• Excessive intake of foods high in vitamin K, such as dark green leafy vegetables including cabbage, broccoli, and Brussels sprouts, mayonnaise, canola, and soybean oils decrease anticoagulation.</li> <li>• Warfarin interacts with many other prescription and over-the-counter drugs, foods, and herbals, so patients should check with their primary care provider and pharmacist to make sure no other interactions apply.</li> </ul>