

## WARFARIN—SELECTED DRUG INTERACTIONS

Assume possible interactions with any medication. When starting/stopping a chronic medication, the INR should be checked at least weekly for 2 to 3 weeks and dose adjusted accordingly. When starting an interacting anti-infective agent, the National Quality Forum recommends checking the INR within 3 to 7 days. Similarly, monitor if significant change in diet (including supplements) or illness resulting in decreased oral intake. For further information regarding mechanism or management, refer to the *Tarascon Pocket Pharmacopoeia* drug interactions database (mobile or Web edition). Drug classes listed in **bold**.

**Increased anticoagulant effect of warfarin / Increased risk of bleeding**

*Monitor INR when agents below started, stopped, or dosage changed. Consider alternative agent.* Acetaminophen  $\geq 2$  g/day for  $\geq 3$  to 4 days, allopurinol, amiodarone\*, **anabolic steroids**, **androgens**, ASA<sup>¶</sup>, cefixime, cefotetan, celecoxib, chloramphenicol, cimetidine<sup>†</sup>, **corticosteroids**, danazol, danshen, disulfiram, dong quai, erlotinib, etravirine, fenofibrate, fish oil, fluconazole, **fluoroquinolones**, fluorouracil, flvoxamine, fosphenytoin (acute), garlic supplements, gemcitabine, gemfibrozil, glucosamine-chondroitin, ginkgo, ifosfamide, imatinib, isoniazid, itraconazole, ketoconazole, leflunomide, levothyroxine<sup>#</sup>, **macrolides**<sup>‡</sup>, metronidazole, miconazole, neomycin (PO for  $>1$  to 2 days), **NSAIDs**<sup>¶</sup>, olsalazine, omeprazole, paroxetine, penicillin (high-dose IV), pentoxifylline, phenytoin (acute), propafenone, quinidine, quinine, **statins**<sup>§</sup>, **sulfonamides**, tamoxifen, **tetracyclines**, tramadol, tigecycline, tipranavir, **TcAs**, valproic acid, voriconazole, vorinostat, vitamin A (high-dose), vitamin E, zafirlukast, zileuton.

**Decreased anticoagulant effect of warfarin / Increased risk of thrombosis**

*Monitor INR when agents below started, stopped, or dosage changed. Consider alternative agent.* Aprepitant, cefotetan, azathioprine, **barbiturates**, bosentan, carbamazepine, coenzyme Q-10, dicloxacillin, fosphenytoin (chronic), ginseng (American), griseofulvin, mercaptopurine, mesalamine, methimazole<sup>#</sup>, mitotane, nafcillin, **oral contraceptives**\*\*<sup>††</sup>, phenytoin (chronic), primidone, propylthiouracil<sup>#</sup>, raloxifene, ribavirin, rifabutin, rifampin, rifapentine, ritonavir, St. John's wort, vitamin C (high-dose). *Use alternative to agents below. Or give at different times of day and monitor INR when agent started, stopped, or dose/dosing schedule changed.* Cholestyramine, colestipol<sup>††</sup>, sucralfate.

\*Interaction may be delayed; monitor INR for several weeks after starting and several months after stopping amiodarone. May need to decrease warfarin dose by 33 to 50%.

<sup>†</sup>Famotidine, nizatidine, or ranitidine, are alternatives.

<sup>‡</sup>Azithromycin appears to have lower risk of interaction than clarithromycin or erythromycin.

<sup>§</sup>Pravastatin appears to have lower risk of interaction.

<sup>#</sup>Hyperthyroidism/thyroid replacement increases metabolism of clotting factors, increasing response to warfarin therapy, and increased bleed risk (typically requires lowering warfarin dose). Reversal of hyperthyroidism (as with methimazole, propylthiouracil) will decrease metabolism of clotting factors and decrease response to warfarin (typically requires increasing warfarin dose).

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