

Apixaban (Eliquis) for Stroke Prevention in Atrial Fibrillation

ROBERT A. BECK, MD, *University of Iowa, Carver School of Medicine, Iowa City, Iowa*

WILLIAM M. KING IV, PharmD, BCPS, *University of Colorado Skaggs School of Pharmacy and Pharmaceutical Sciences, Aurora, Colorado*

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The series coordinator for *AFP* is Allen F. Shaughnessy, PharmD, MMedEd, Tufts University, Boston, Mass.

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Apixaban (Eliquis) is the third new oral anticoagulant recently labeled to reduce the risk of stroke and systemic embolism in patients with nonvalvular atrial fibrillation. Unlike warfarin (Coumadin), which indirectly decreases several factors in the extrinsic pathway, apixaban directly inhibits coagulation factor Xa, which cleaves prothrombin to yield active thrombin.¹ Apixaban does not require monitoring of the international normalized ratio.

Drug	Starting dosage	Dose form	Cost*
Apixaban (Eliquis)	5 mg twice daily with or without food; 2.5 mg twice daily in patients with two of the following characteristics: age \geq 80 years, body weight < 133 lb (60 kg), or serum creatinine level \geq 1.5 mg per dL (133 μ mol per L)	5- and 2.5-mg tablets	\$287

*—Estimated retail price of one month's treatment based on information obtained at <http://www.goodrx.com> (accessed January 29, 2014).

SAFETY

Apixaban has a lower risk of bleeding than warfarin, but a slightly higher risk of minor bleeding compared with aspirin. One additional major bleeding episode (defined as clinically overt bleeding accompanied by a hemoglobin decrease of 2 g per dL [20 g per L] and occurring at a critical site or resulting in death) will be prevented for every 66 patients treated with apixaban instead of warfarin over 1.8 years.² Death from any cause, including death from major bleeding, occurs less often with apixaban than with warfarin treatment (number needed to treat [NNT] = 132 for 1.8 years).²

Discontinuing apixaban therapy places patients at a greater risk of thrombotic events. Unless they are discontinuing treatment because of serious bleeding, patients should be prescribed an alternative anticoagulant to prevent an increased risk of stroke.³

Although apixaban has fewer drug interactions than warfarin, coadministration with antiplatelet agents, fibrinolytics, heparin, aspirin, and chronic nonsteroidal anti-inflammatory drugs increases the risk of bleeding.³ Apixaban has not been studied in children or in pregnant or breastfeeding women and is U.S. Food and Drug Administration pregnancy category B.³ There is no way to reverse anticoagulation caused by apixaban.

TOLERABILITY

Apixaban is well tolerated. In clinical trials, about one in 16 patients (6.3%) discontinued use, primarily for bleeding events (i.e., non-major bleeding that led to a physician intervention or a change in antithrombotic therapy). Significantly fewer patients taking apixaban should discontinue therapy compared with those taking warfarin or aspirin. Nausea will occur in about 7% of patients taking apixaban.⁴

EFFECTIVENESS

Apixaban was compared with aspirin therapy in 5,600 patients who had chronic atrial fibrillation and at least one additional risk factor for stroke, but for whom warfarin therapy was unsuitable. The likelihood of stroke was lower with apixaban than with aspirin (NNT = 50 per 1.1 years; 95% confidence interval, 44 to 84).¹ Systemic embolism risk was also lower with apixaban. In addition, the annual risk of death from any cause was not significantly different in patients taking apixaban vs. aspirin.

Apixaban is similarly effective to warfarin for stroke prevention. In a study of 18,201 patients with atrial fibrillation or flutter and at least one additional risk factor for major stroke (i.e., based on the CHADS₂ stroke risk prediction tool [congestive heart failure, hypertension, age 75 years or older, diabetes mellitus, and stroke or transient ischemic attack]), there were only small and clinically insignificant differences in the rates of stroke, systemic embolism, and death. Apixaban has not been directly compared with dabigatran (Pradaxa) or rivaroxaban (Xarelto), two other recently marketed oral anticoagulants.

PRICE

A one-month supply of apixaban costs approximately \$287. Unlike warfarin, apixaban has no associated laboratory monitoring costs.

SIMPLICITY

Apixaban is taken orally twice daily. The usual dose is 5 mg, reduced to 2.5 mg for patients with any two of the following: age

80 years or older, body weight less than 133 lb (60 kg), or serum creatinine level of 1.5 mg per dL (133 μmol per L) or more. There are no known interactions with food.

Bottom Line

Apixaban is at least as effective as aspirin or warfarin for preventing strokes in high-risk patients with nonvalvular atrial fibrillation, especially those who cannot or will not take warfarin. It is slightly less likely to cause major bleeding and may have better compliance because it does not require frequent laboratory monitoring. However, apixaban is significantly more expensive than warfarin or aspirin, and its anticoagulation effect cannot be reversed in the event of an emergency.

Address correspondence to Robert A. Beck, MD, at rbeck@crmef.org. Reprints are not available from the authors.

Author disclosure: No relevant financial affiliations.

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