

<b>“Stroke prevention: Age alone does not rule out warfarin” <i>J Fam Pract</i> 2007; 56:902–906.</b>	
<b>PURLs review form</b>	
<b>Randomized controlled trials</b>	
<b>SECTION 1: IDENTIFYING INFORMATION</b>	
<b>1.1 Citation</b>	Mant J, Hobbs FD, Fletcher K, et al. Warfarin versus aspirin for stroke prevention in an elderly community population with atrial fibrillation (the Birmingham Atrial Fibrillation Treatment of the Aged Study, BAFTA): a randomized controlled trial. <i>Lancet</i> 2007; 370:493–503
<b>1.2 PubMed ID</b>	17693178
<b>1.3 Reviewer name</b>	Sarah-Anne Schumann, MD
<b>1.4 Reviewer affiliation</b>	Department of Family Medicine, University of Chicago
<b>1.5 Date review assigned</b>	September 6, 2007
<b>SECTION 2: DETAILED STUDY DESCRIPTION</b>	
<b>2.1 Number of patients starting each arm of the study?</b>	485 aspirin, 488 warfarin
<b>2.2 Main characteristics of study patients? (Inclusions, exclusions, demographics, care settings, etc.)</b>	Age ≥75 years; atrial fibrillation or atrial flutter on ECG <b>Exclusions:</b> Rheumatic heart disease, major nontraumatic hemorrhage in past 5 years, intracranial hemorrhage, endoscopically proven peptic ulcer disease in past year, esophageal varices, allergy to either study drug, terminal illness, surgery in past 3 months, BP >180/110, or if PCP judges, based on risk factors, that patient should (or should not be) on warfarin <b>Demographics:</b> Average age 81.5 years, 55% male, 39%–40% already on warfarin, 12%–13% had prior stroke, 53%–55% had history of hypertension, 13%–14% diabetes, 19%–20% heart failure, 10%–12% MI <b>Care settings:</b> From primary care practices
<b>2.3 Intervention(s) (treatment, procedure, drug, other therapy, policy, etc) being investigated?</b>	75 mg aspirin vs warfarin with target INR 2.5; 2–3 acceptable range (frequency/method of INR testing not specified to simulate real-life control of INR)
<b>2.4 Comparisons of treatment(s), placebo, usual care and/or no treatment?</b>	Treatments
<b>2.5 Length of follow up? (Note specified</b>	2–5 years (2001–2004 until 2006)

endpoints, eg, death, cure, pain relief, etc.)	
<b>2.6</b> What outcome measures are used? (List all measures used to assess effectiveness)	<b>Primary outcome:</b> First occurrence of fatal or nonfatal disabling stroke (ischemic or hemorrhagic) or clinically significant arterial embolism (not PE) <b>Secondary outcomes:</b> Major extracranial hemorrhage, hospital admission or death as a result of non-stroke vascular event, all-cause mortality
<b>2.7</b> What is the effect of the intervention(s)? (Include absolute risk, relative risk, NNT, CI, <i>P</i> -values, etc.)	Yearly risk of primary events (stroke, intracranial hemorrhage, systemic emboli) 1.8% vs 3.8%, relative risk=0.48 (95% CI, 0.28–0.80, <i>P</i> =.003), absolute yearly reduction=2% (95% CI, 0.7–3.2)
<b>SECTION 3: INTERNAL VALIDITY</b>	
<b>3.1</b> Study addresses an appropriate and clearly focused question	Well addressed
<b>3.2</b> Random allocation to comparison groups	Well addressed
<b>3.3</b> Concealed allocation to comparison groups	Well addressed
<b>3.4</b> Subjects and investigators kept “blind” to comparison group allocation status?	Not applicable: not blinded
<b>3.5</b> Comparison groups are similar at the start of the trial	Well addressed
<b>3.6</b> Were there any differences between the groups/arms of the study besides the intervention(s) under investigation? If yes, please indicate whether these differences are a potential source of bias	Well addressed
<b>3.7</b> Were all relevant outcomes measured in a standardized, valid, and reliable way?	Well addressed
<b>3.8</b> Are patient-oriented outcomes included? If yes, what are they?	Yes. Occurrence of stroke or hemorrhage
<b>3.9</b> What percent dropped out and were lost to follow-up? Could this percentage bias the results? How?	
<b>3.10</b> Was there intention to treat analysis?	Yes

If not, could this bias the results? How?	
<b>3.11</b> If a multisite study, are results comparable for all sites?	Not addressed
<b>3.12</b> Is the funding for the trial a potential source of bias? If yes, what measures, if any, were taken to insure scientific integrity?	Funded by Medical Research Council
<b>SECTION 4: EXTERNAL VALIDITY</b>	
<b>4.1</b> To which patients might the findings apply? Include patients in the study and other patients to whom the findings may be generalized	Primary care patients with atrial fibrillation, ages 75 and over
<b>4.2</b> In what care settings might the findings apply or not apply?	Primary care
<b>4.3</b> To which clinicians or policy-makers might the findings be relevant?	Primary care providers
<b>SECTION 5: REVIEW OF THE SECONDARY LITERATURE</b>	
<b>5.1</b> DynaMed excerpts	Includes this study and many others that support warfarin for atrial fibrillation despite increased risk of hemorrhage; no summary recommendation specifically for the elderly
<b>5.2</b> Dynamed citation/access date	Dynamed editorial team. Garvin R (reviewer). Thromboembolic prophylaxis in atrial fibrillation. Updated 8/19/07. Available at: <a href="http://www.ebscohost.com/dynamed">www.ebscohost.com/dynamed</a> . Accessed on 9/5/2007
<b>5.3</b> UpToDate excerpts	Recommend using CHAD2 score and treating all with $\geq 3$ with warfarin, 0 with aspirin; 1, 2 with either; nothing specific on elderly patients
<b>5.4</b> UpToDate citation/access date	Manning, Kistler, Hart. Anticoagulation to prevent embolization in atrial fibrillation. UpTo Date; updated 2/21/07. Available at: <a href="http://www.uptodate.com">www.uptodate.com</a> . Accessed on 9/5/07
<b>5.5</b> PEPID PCP excerpts	Warfarin (INR 2.0–3.0) remains the most efficacious antithrombotic regimen for the primary and secondary prevention of cardioembolic stroke in high-risk patients with non-valvular atrial fibrillation; aspirin therapy reduces the risk of stroke to a lesser degree and may be useful in low-risk patients with NVAf or in patients at high risk for bleeding
<b>5.6</b> PEPID citation/access date	Robertson S, Mayer J. Does combining aspirin and warfarin decrease the risk of stroke in

	patients with nonvalvular atrial fibrillation? PepidPCP [database online]. Available at: <a href="http://www.pepidonline.com">www.pepidonline.com</a> . Accessed on 9/5/07.
<b>5.7</b> Recommendations for PEPID PCP	
<b>5.8</b> Other excerpts (eg, USPSTF recommendations, other guidelines, etc.)	
<b>5.9</b> Citations for other excerpts	
<b>SECTION 6: CONCLUSIONS</b>	
<b>6.1</b> How well does the study minimize sources of internal bias/maximize internal validity? (Give one number on a scale of 1 to 7; 1 = extremely well, 4 = neutral, 7 = extremely poorly)	<b>2</b>
<b>6.2</b> If coded as 4 or below, please describe the potential bias and how it could affect the study results. Specifically, what is the likely direction in which potential sources of internal bias might affect the study results?	
<b>6.3</b> Are the results of this study relevant to the health care needs of patients cared for by “full scope” family physicians, general internists, general pediatricians, and/or general obstetricians/gynecologists, without significant changes in programs or policies such as the organization or financing of practice? (Give one number on a scale of 1 to 7; 1 = absolutely relevant, 4 = neutral, 7 = not at all relevant)	<b>1</b>
<b>6.4</b> Please explain your reasoning for your response to item 6.3 regarding the relevance to the health care of patients cared for by generalist physicians?	Very relevant, as the study was conducted in a primary care setting

<p><b>6.5</b> What is the main recommendation for change in practice (if any)? Include a description of the change in practice, the indications, and the target population</p>	<p>Warfarin should be first-line treatment for atrial fibrillation in patients over 75 (already recommended but not based on any randomized controlled trials specific to this age of patient in primary care)</p>
<p><b>SECTION 7: EDITORIAL DECISION</b></p>	
<p><b>7.1</b> FPIN PURLs editorial decision</p>	<p>PURL</p>
<p><b>7.2</b> Editor</p>	<p>Bernard Ewigman, MD, MSPH, Professor &amp; Chairman, Department of Family Medicine, The University of Chicago</p>
<p><b>7.3</b> Date of decision</p>	<p>October 10, 2007</p>
<p><b>7.4</b> Brief summary of the reason for decision</p>	<p>This is the first RCT done in a primary care setting that enrolled patients over 75 years of age, and it not only confirms that warfarin is superior to aspirin for preventing stroke in patients with chronic atrial fibrillation, but it also shows that it is similarly effective. Not that bleeding is not a risk in the elderly; it is. But the benefit clearly outweighs the risk. The recommendation to use warfarin in the elderly is not completely new; this RCT allows the recommendation to be made with much more confidence. It is also clear that warfarin is underused in the elderly, and in that sense, this is a practice changer</p>