Author's response to reviews

Title: Implementing hospital guidelines improves warfarin use in non-valvular atrial fibrillation: a before-after study.

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Author's response to reviews: see over
Re: MS 2003628012140340 Implementing hospital guidelines improves warfarin use in non-valvular atrial fibrillation: a before-after study.

Dear Editor,
Thank you very much for giving us the opportunity to revise the above-referenced paper. We wish particularly to thank you and the reviewers for the useful comments which are truly appreciated.

The present paper has been revised according to the Editor and Reviewers’ comments and suggestions. A point-by-point reply to the Editor and Reviewers’ comments has been included. The revised manuscript conforms to the journal style.

We prefer if the manuscript could be considered for publication by the journal to which it was originally submitted.

We would like to thank again you and the reviewers, for giving us the opportunity to improve the quality of our paper.

Sincerely,

Simona Bo, on the behalf of all authors.
Answers to the Editor.

Re: MS 2003628012140340 Implementing hospital guidelines improves warfarin use in non-valvular atrial fibrillation: a before-after study.

Thank you very much for your kind and useful comments; please find the answers to your suggestions listed below.

Please also document in the Methods section of the revised version of the manuscript the details of the institutional review board that granted ethical approval for the study, and the type of consent sought from the participants.

The project was planned and performed during 1999-2004. During these years the Hospital Ethic Committee approval was not required for guideline development and implementation, and for evaluation of its efficacy. All patients gave their written informed consent to analysis of data from their clinical records, and all procedures were in accordance with the Declaration of Helsinki. This has been added to the Method section (page 5, line 16-17).
Answers to the Referee 1.

Re: MS 2003628012140340 Implementing hospital guidelines improves warfarin use in non-valvular atrial fibrillation: a before-after study.

Thank you very much for your kind and useful comments; please find the answers to your suggestions listed below.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Authors did not consider CHADS2 score. A comment is needed
Authors' guidelines differ from those of ACCP. Again a comment should be made

The working group decided to adapt an already published guideline. By using the AGREE instrument [Qual Saf Health Care 2003;12:18-23], the document selected as the main source of the recommendation was the guideline of the Scottish Intercollegiate Guidelines Network (SIGN). This guideline was overall chosen, since it better allowed to evaluate the cardio-embolic risk reduction with different antithrombotic treatments. Other motivations emerged from the working group were: i) it included also a very high risk category (corresponding to previous ischaemic stroke or TIA), ii) it attributed a similar weight to different thromboembolic risk factors, iii) it seemed easy and practical to use, iv) it was an European guideline.

The CHADS2 score, a new stroke risk index, has recently been proposed and validated [JAMA 2001;285:2864-2870]. It allows an easy and practical risk stratification, by adding 1 point for each of the following conditions: recent congestive heart failure, hypertension, age at least 75 years, diabetes mellitus, and adding 2 points for having had a prior stroke/TIA. Even if this score represents an easy and practical stratification tool, at the time the hospital guideline was planned, it was validated in a single study on a large not-European cohort. Only recently, in fact, the predictive role of this score has been validated in an Italian cohort [Poli D, et al. Thrombosis Res 2007; in press].

In the classification we used, in line with this score: -i) a higher weight was attributed to prior stroke/TIA, which by itself confers a very high risk, -ii) other risk factors were equally considered (e.g. diabetes and hypertension or heart failure), differently from the ACCP scheme, where diabetes confers a moderate risk, while hypertension and heart failure a high risk. (This has been briefly added in the Discussion section, page 14, line 5-9).

The American College of Chest Physician (ACCP) Consensus Conference on Antithrombotic Therapy classified patients as high risk if they had prior cerebral ischemia (or systemic embolism), hypertension, congestive heart failure (either clinical or systolic dysfunction on echocardiography), age>75 years, or at least 2 moderate risk factors (age 65-75 years, diabetes mellitus, and coronary artery disease. Patients with 1 moderate risk factor were classified as moderate risk, and patients with none risk factors were classified as low risk [Chest 1998; 114: 579S-589S].

The classification used in our hospital, according to SIGN guidelines, differs from the ACCP scheme with regard to the following points: i) a higher weight was attributed to prior stroke/TIA, which by itself determined a very high risk, in line with CHADS2 criteria; ii) other risk factors were given the same weight; iii) the hemorrhagic risk of treatment was combined with its antithrombotic effect, and age≥75 years was considered as a cut-off associated with a greater bleeding risk with OAT use [1].

(This has been briefly added in the Discussion section –page 14, line 10-16-).
Discussion page 11 line 9: ".rose to 5055%...and up to 50-55%. Something is wrong
The correct sentence is: “...rose to 48-55% in the years 1995-1997,... and up to 50-58% around the year 2000...”. Thank you.
We regret for the mistake.

page 13, lines 5-8: please add a comment
A comment has been added to this sentence, according to your request (page 13, line 8-10).
Answers to the Referee 2.

Re: MS 2003628012140340 Implementing hospital guidelines improves warfarin use in non-valvular atrial fibrillation: a before-after study.

Thank you very much for your kind and useful comments; please find the answers to your suggestions listed below.

Even though the guidelines on atrial fibrillation were not available when the authors planned their work I suggest to mention them (JACC, August 2006) in the discussion. The criteria reported there are a bit different from those adopted by ACCP.

Guidelines on atrial fibrillation published on August 2006 have been mentioned in the Discussion section, according to your request. The following sentence has been added: “…..Recently, the American College of Cardiology, the American Heart Association and the European Society of Cardiology proposed a joint stratification which recognised a higher risk to previous stroke/TIA or embolism, and gave the same weight to diabetes, hypertension, heart failure/left ventricular dysfunction, which were moderate risk factors [JACC; 2006, 48:854-906].
All these schemes did not consider the bleeding risk, when recommending the treatment of choice.” (page 14, line 17-23).

It would be interesting to know where patients with atrial fibrillation have been sent for monitoring thier treatment (General Practitioner, Anticoagulation clinics, other. The opinion of the authors would also be interesting to be briefly reported.

In our guideline, we suggested to contact the general practitioner before discharge to decide the best way of OAT monitoring. We suggested outpatient monitoring in anticoagulation clinics, above all for elderly or more complicated patients.
This has been added to the text, according to your request (page 7, line 8-10).