**Reviewer’s report**

**Title:** Patient Self-Management of Oral Anticoagulation with Vitamin K Antagonists in everyday practice: clinical outcomes in a single centre cohort after long-term follow-up

**Version:** 0  **Date:** 18 Apr 2019

**Reviewer:** J E Ansell

**Reviewer's report:**

The study by Corrochano et al. on PSM of VKA therapy is of interest as a single center retrospective analysis. The authors should consider the following comments. Page 3, last paragraph: am not sure I would characterize the "learning" process for PSM as simple. This statement should also be referenced. The following statement about TTR is not true for all studies, and in fact, was not a finding in this study. The authors might want to say a word in the Introduction about PST without PSM since there are a number of studies of PST that they do not reference regarding TTR, outcomes, etc. Page 5: the authors should define criteria for enrollment. Was every patient in their program enrolled or only those who accepted? There is great potential for bias at this point. How many patients did not accept PSM. What was the nature of this group? Page 5: education session - minimum of 2 hours; what was the max; what was the average time. This education is presumably on top of routine education that all patients should have who are started on VKA therapy. This extra education is another reason that this group of patients might do better than a non-PSM group. Page 6: Limitations on data acquisition should be in the discussion on Limitations of the Study. Page 7: 1027 patients were trained for the study. How many over this time period did not enter into PSM (what is the denominator). Page 8: first paragraph: the very long mean time under conventional treatment before enrollment is another weakness of the study design. These patients were all accustomed to VKA therapy and many of the adverse events already happened early on as in most cohorts. Authors should define what they mean by "conventional" control in this cohort before they enrolled. Was it equivalent to specialized anticoagulation clinic or simply individual doctors taking care of patients. How often did patients need help with PSM. How often did they have to call their doctor with a problem. The authors need to have a better section on limitations of study under the discussion, preferably before the conclusion. They need to address data acquisition, selection bias, education bias, experienced patients, etc. In Table 1 the authors record event rates by % number of events whereas in Table 2 they are listed based on patient-yrs of therapy, and thus cannot be compared. I would eliminate tables 3.1, 3.2 and 3.3 and perhaps save for another manuscript such as a systematic review.

**Are the methods appropriate and well described?**

If not, please specify what is required in your comments to the authors.

No

**Does the work include the necessary controls?**

If not, please specify which controls are required in your comments to the authors.
Unable to assess

Are the conclusions drawn adequately supported by the data shown?  
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?  
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I recommend additional statistical review

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