Reviewer's report

Title: Unsedated Peroral Wireless pH Capsule Placement vs. Standard pH Testing: A Randomized Study and Cost Analysis

Version: 2 Date: 3 March 2012

Reviewer: Stefan Öberg

Reviewer's report:

Major compulsory revisions

1. Discussion, first paragraph. The authors conclude that their study “confirms that WC insertion is better tolerated than SC both overall and during placement”. However, the study design does not allow the authors to make this conclusion as this would require that all subjects underwent both tests in a cross-over study design. The conclusion needs to be changed.

2. Statistics: Data obtained from VAS scales are usually not normally distributed. The authors chose to assess differences in discomfort levels using means and the Student t-test. If the data was normally distributed this needs to be stated and if not, non-parametric statistical analysis should be used.

3. Most, if not all patients who undergo esophageal pH monitoring also undergo an upper GI endoscopy. How many patients in the ESM+SC and ESM+WC groups had an endoscopy shortly before or after the pH-study. As it is the total cost for investigating symptoms suggestive of GERD that is of interest, the cost of this additional endoscopy needs to be included in the analysis.

4. The analysis of the costs of the different strategies is based on more or less well-documented assumptions that are regarded as facts in the statistical analysis. This is a limitation of the study that needs to be mentioned in the discussion.

5. Studies on adverse symptoms of pH monitoring has previously been performed by other groups. The observations of these studies should be mentioned and compared with the result of the present study.

6. Discussion, second paragraph. The two last sentences needs to be deleted as efforts to validate the accuracy of the conversion factor was not made in the present study.

Minor Essential Revisions

1. In the first paragraph of the Introduction it is stated that ambulatory esophageal pH monitoring is the gold standard for establishing the diagnosis of GERD. However, the diagnostic accuracy of esophageal pH monitoring is relatively low and therefore no gold standard.
**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests.