

ANSWERING REVIEWERS

December 3, 2014



Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 15040-review.doc).

Title: Comparison of the diagnostic yield and outcomes between standard 8 hour capsule endoscopy and the new 12 hour capsule endoscopy

Author: Merajur Rahman, Stuart Akerman, Bethany DeVito, Larry Miller, Meredith Akerman, Keith Sultan

Name of Journal: *World Journal of Gastroenterology*

ESPS Manuscript NO: 15040

The manuscript has been improved according to the suggestions of reviewers:

1 Format has been updated

2 Revision has been made according to the suggestions of the reviewer

Reviewer 00068472

1) PillCam SB2-ex had a significantly higher completion rate than PillCam SB2 (88% vs. 79.5%; $p = 0.03$). Why?

"Our findings do confirm that the extra 4 hours of operating time provided by the 12 hour SB2-ex resulted in a significantly higher rate of complete studies over the 8 hour SB2 capsule for an inpatient population, 88%, vs. 79.5%, $p=0.03$ respectively." (Discussion section paragraph 1)

2) Overall, the diagnostic yield was greater for the 8 hour capsule (48.5% for SB2 vs. 35% for SB2-ex; $p = 0.01$), with a greater rate of detection of AVMs (17.5% vs. 9.5%, $p=0.03$). They should explain in more detail these (unexpected?) results

"This unexpected finding would appear to challenge the notion that a longer operating time translates into an improvement in diagnostic yield. We suspect however that the difference in diagnostic yield found in the present study is related to the advancing/changing expertise of the interpreting gastroenterologists over time. As noted, the PillCam SB2 examinations all occurred in the years 2009 to 2011 prior to the PillCam SB2-ex examinations 2011 to 2013. It is possible that over the time period studied that the standards by which each of the gastroenterologists qualified a finding as "positive" may have changed. It is particularly notable that the largest classification of significant finding by SB2 was AVMs, found in 17.5% of studies, compared to 9.5% for the SB2-ex. There is no gold standard for labeling a finding as an AVM by capsule endoscopy. It is possible that with more practice, the reporters' threshold to interpret AVMs as a significant finding increased leading to less AVMs reported, and a decreased diagnostic yield overall." (Discussion section paragraph 2)

3) The authors should spend time to discuss the potential cost-effectiveness of the new capsule endoscopy.

"Though even if we accept a similar diagnostic yield between the two capsule systems,

there is still a potential for improved cost effectiveness with the 12 hour system. Since extending the operating life of the capsule resulted in more complete studies, this would seem to offer a cost benefit by avoiding repeating those studies which were incomplete, by not prolonging the patient's hospital admission to repeat incomplete studies, and by limiting the need for diagnostic imaging to confirm capsule passage which is often required when visualization of the cecum is not achieved during capsule recording." (Discussion section paragraph 3)

4) Further prospective multicentre randomized studies are needed to establish the clear-cut clinical advantage of PillCam SB2-ex over PillCam SB2.

Added a sentence that prospective studies are needed to establish an advantage of PillCam SB2-ex over PillCam SB2 (Conclusion section paragraph 1)

Reviewer 02550913

4) Please define "completion" at the introduction. Some readers are not familiar with the term

"...complete examinations, defined by passage of the capsule into the colon during its operating time..." (Introduction section paragraph 3)

5) Results - the actual findings described in the third paragraph belong to the previous paragraph.

Result section paragraph 3 was combined with paragraph 2

6) Conclusions are too long. Please limit the conclusions only to what is demonstrated in the study. Delete from "Performing" onwards and simply add a sentence stating that prospective studies are needed.

Conclusion was edited with the recommended revision. (Conclusion section paragraph 1)

7) Table 2 - add %

Percentages added to table 2.

8) The diagnostic yield results are surprising and at the conclusion instead of writing that you did not demonstrate a superiority you should state that the 12 hour camera did reach a diagnostic yield as good as the 8 hour camera.

Please refer to result section paragraph 2 with accompanying discussion section paragraph 2.

Reviewer 00009415

No revisions were recommended.

3 References and typesetting were corrected

Thank you again for publishing our manuscript in the *World Journal of Gastroenterology*

Sincerely yours,

Merajur Rahman, MD
Division of Gastroenterology
Department of Medicine
North Shore University Hospital
300 Community Drive
Manhasset, NY 11030, USA
rmerajur@nshs.edu
Telephone: 1+516-562-4286
Personal Phone Number: 1+347-870-0002
Fax Number: 1+516-562-3555