Author’s response to reviews

Title: AIMS65 scoring system is comparable to Glasgow-Blatchford score or Rockall score for prediction of clinical outcomes for non-variceal upper gastrointestinal bleeding

Authors:

Min Seong Kim (kingtta21@naver.com)
Jeongmin Choi (doct00@hanmail.net)
Won Chang Shin (wcshin@paik.ac)

Version: 2 Date: 11 Jan 2019

Author’s response to reviews:

REVIEWER COMMENTS:

Reviewer reports:
Technical Comments:
1. Incomplete Declaration section. Please format manuscript, in particular the Declarations section according to our editorial guidelines.

Response: We attached consent form and declaration section.

Editor Comments:

BMC Gastroenterology operates a policy of open peer review, which means that you will be able to see the names of the reviewers who provided the reports via the online peer review system. We encourage you to also view the reports there, via the action links on the left-hand side of the page, to see the names of the reviewers.

Reviewer reports:
Chikara Iino (Reviewer 1):

1. I did not recognize your revised sections. You should highlight the revised section in red with point by point statements.

Response: We did highlight the revised section in red with point by point statements.

2. In previous comment to authors, 1. Do authors have any new recommendation for daily practice according to these results? Author should response fully in discussion sentence.
Response: We added it in the discussion and conclusion section.
The AIMS65 score in NVUGI bleeding patients was comparable to the GBS or Rockall scoring systems when predicting mortality, rebleeding, ICU admission, and endoscopic intervention in Korean patients. The AIMS65 score is easy to calculate using variables routinely available in the emergency clinical situation, and has the advantage that it can be performed before an endoscopy. Therefore, we recommend AIMS65 for prediction of severity of GI bleeding in daily practice. Before the AIMS65 becomes a standard of care for the risk stratification of UGI bleeding cases, further multicenter prospective studies will be required.

3. In method, "p values were multiple by 4". I think "p values were multiple by 6". There are 4 variables hence total 4C2 = 6 comparisons.

We searched a Bonferroni correction, and 4 variables is correspondent with 4. We think 4 comparisons are correct. Here is the resources.

Controlling the familywise error rate: Bonferroni correction
The classic approach to the multiple comparison problem is to control the familywise error rate. Instead of setting the critical P level for significance, or alpha, to 0.05, you use a lower critical value. If the null hypothesis is true for all of the tests, the probability of getting one result that is significant at this new, lower critical value is 0.05. In other words, if all the null hypotheses are true, the probability that the family of tests includes one or more false positives due to chance is 0.05.
The most common way to control the familywise error rate is with the Bonferroni correction. You find the critical value (alpha) for an individual test by dividing the familywise error rate (usually 0.05) by the number of tests. Thus if you are doing 100 statistical tests, the critical value for an individual test would be 0.05/100=0.0005, and you would only consider individual tests with P<0.0005 to be significant.
Source: http://www.biostathandbook.com/multiplecomparisons.html

Reviewer comments: THE MANUSCRIPT READS BETTER AND IS MORE SCIENTIFICALLY CORRECT-- WELL DONE AUTHORS! BUT THERE ARE STILL SEVERAL POINTS THAT WOULD BENEFIT BY CHANGING- SEE BELOW.

1. Make your conclusions in the abstract stronger by saying that AIMS65 is a much easier, readily calculated scoring system compared to the others maybe by ending the conclusions with", but the AIMS65 scoring system is much easier and readily calculated that the other scoring systems"

Response: We added it in the abstract section as follows:
Because AIMS65 is a much easier, readily calculated scoring system compared to the others, it might be recommended for prediction of NVUGI bleeding in daily practice.

2. Add the statistical comparison of the AIMS65 to the other scoring systems in the legend to figure 2

Response: We added it in the figure legend 2. The AIMS65 score (AUC 0.84, 95% CI, 0.81-0.88) seemed to be superior to the GBS (AUC 0.72, 95% CI, 0.68-0.76) for predicting mortality, but there was no statistically significant difference between the groups (P=0.07)

3. Table 4 what are the p values comparing. Best to add a footnote describing this
Response: p-value denotes the Fisher exact test, which was used to compare low and high-risk groups.

4. Page 5 line 11 I personally would change the term "spurting" to "actively bleeding"

Response: We changed to actively bleeding.

5. I really think that you should address the limitation of total patient number in the limitations section of the discussion one sentence only

Response: We described it in the discussion section as follows:
Limitation of the study is single center study and death events were rare.

6. Page 12 lines 33- 39 you need to reword this to" Our study strongly suggests that the AIMS65 scoring system is better than the GBS system for predicting mortality (p=0.07) " . This way the reader can determine if they think it is superior ( remember your numbers are not great enough to really answer the question statistically and the p value is NOT truly statistically significant. Be upfront and word it as "strongly suggests" rather than claiming it IS superior."

Response: We agreed that your comments on the meaning of superiority. But we did not strongly suggest that AIMS65 is better than the GBS for predicting mortality based on AUC value.
Instead, we changed the sentence to make it clear:
With regard to AUC value, the AIMS65 scoring system (0.84) seemed more accurate than the GBS system (0.72) for predicting mortality, but there was no statistically significant difference between the groups (P=0.07) (Table 3) (Fig. 2).