

## AIMS65: A promising upper gastrointestinal bleeding risk score but further validation required

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Author contributions: Boyapati R drafted the work; Majumdar A and Robertson M revised and edited the work; all authors were involved in designing the work and giving final approval for the published version.

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Received: March 24, 2014 Revised: April 23, 2014

Accepted: June 12, 2014

Published online: October 21, 2014

### Abstract

A novel upper gastrointestinal bleeding risk stratification score (AIMS65) has recently been developed and validated. It has advantages over existing risk scores including being easy to remember and lack of subjectivity in calculation. We comment on a recent study that has cast doubt on the applicability of AIMS65 in the peptic ulcer disease population. Although promising, further studies are required to evaluate the validity of AIMS65 in various populations.

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**Key words:** Gastrointestinal haemorrhage; AIMS65; Endoscopy; Prognosis; Hemostasis; Gastrointestinal bleeding

**Core tip:** A novel upper gastrointestinal bleeding risk stratification score (AIMS65) has recently been developed and validated. It has advantages over existing risk scores including being easy to remember and lack of subjectivity in calculation. We comment on a recent study that has cast doubt on the applicability of AIMS65 in the peptic ulcer disease population.

Although promising, further studies are required to evaluate the validity of AIMS65 in various populations.

Boyapati R, Majumdar A, Robertson M. AIMS65: A promising upper gastrointestinal bleeding risk score but further validation required. *World J Gastroenterol* 2014; 20(39): 14515-14516 Available from: URL: <http://www.wjgnet.com/1007-9327/full/v20/i39/14515.htm> DOI: <http://dx.doi.org/10.3748/wjg.v20.i39.14515>

### TO THE EDITOR

We read with interest the recent article by Jung *et al*<sup>[1]</sup> titled “Is the AIMS65 score useful in predicting outcomes in peptic ulcer bleeding?”. The study examined the validity of the novel upper gastrointestinal bleeding (UGIB) risk stratification system AIMS65 in patients presenting with peptic ulcer-related bleeding. The original AIMS65 study included all patients with UGIB irrespective of aetiology<sup>[2]</sup>. Jung *et al*<sup>[1]</sup> hypothesised that because three of the five AIMS65 criteria (albumin, altered mental status and INR) are associated with variceal UGIB, AIMS65 may not be applicable to non-variceal UGIB. Although the study’s results were interesting, we would like to suggest two considerations.

First, the authors used a composite endpoint of re-bleeding within 30 d of index endoscopy, death within 30 d, repeat endoscopy, surgical intervention or interventional radiology procedure to evaluate the sensitivity and specificity of AIMS65. However, the AIMS65 score was derived and validated for a specific endpoint of in-hospital mortality<sup>[2]</sup>. It was also found to be accurate for length of stay and cost. Furthermore, the other commonly used scoring systems [Rockall score and Glasgow Blatchford Score (GBS)] were designed for different endpoints to the one used by the authors. The Rockall score was designed to predict mortality and GBS for a

composite of in-hospital mortality, rebleeding, endoscopic or surgical intervention and blood transfusion. The authors did not explain the reasoning behind the use of their composite endpoint.

Second, the authors did not compare the performance of AIMS65 with any of the existing risk stratification scores. Although the authors aim was to investigate the applicability of AIMS65 in peptic ulcer-related bleeding, the important unanswered clinical question is which risk stratification score is best in terms of accuracy and ease of use in the clinical setting. Despite consensus guidelines recommending the use of risk scoring systems, there has not been widespread adoption in clinical practice. This appears mainly due to their complexity of use and/or the requirement of endoscopic data to calculate the score.

Although AIMS65 needs to be further validated, it has the advantages of simplicity and lack of subjectivity compared to existing scoring systems. It has been recently validated for in-hospital mortality<sup>[2]</sup>, 30 and 90 d mortality<sup>[3]</sup> and compared favourably to the GBS for

in-hospital mortality<sup>[4]</sup>. Further studies are required to determine the future role of AIMS65 as a useful clinical tool for risk stratification of UGIB.

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**P- Reviewer:** Campo SMA, Sung J, Yang MH  
**S- Editor:** Qi Y **L- Editor:** A **E- Editor:** Liu XM





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ISSN 1007-9327

