Author’s response to reviews

Title: Utilization of Base Deficit and Reliability of Base Deficit as a Surrogate for Serum Lactate in the Peri-Operative Setting

Authors:

Lakhmir S Chawla (lchawla@mfa.gwu.edu)
Amirali Nader (amirali_nader@yahoo.com)
Todd Nelson (tanelson@gmail.com)
Trusha Govindji (tgovin@gwu.edu)
Ryan Wilson (gwryanwilson@yahoo.com)
Sonia Slyzk (soniaszlyk@hotmail.com)
Aline Nguyen (aline312@hotmail.com)
Christopher Junker (cjunker@gmail.com)
Michael Seneff (mseneff@mfa.gwu.edu)

Version: 4 Date: 2 July 2010

Author’s response to reviews: see over
June 25, 2010

Sabina Alam, PhD
Senior Scientific Editor
BMC series journals

Dear Dr. Alam,

We would like to thank the editorial staff and the reviewers for their thoughtful critiques and suggestions. We have revised the manuscript to reflect these concerns, and we believe that we have produced a much-enhanced manuscript. Please find a version with the edits and a clean version.

Warm regards,

Lakhmir S. Chawla, MD
Assistant Professor of Medicine
George Washington University Medical Center
The authors appear to have made appropriate revisions to the manuscript and addressed all reviewer comments and questions. However, there remain two issues that should be corrected/clarified, involving Tables 2 and 3.

Major compulsory revisions:

1. Table 2 is somewhat confusing. There should not be separate columns for "Mean" and "SD". In fact, for many of the variables the data presented in the column is not the mean, but is the absolute number and the percentage - i.e. gender, race, etc. This should simply be in one column with a heading of "Study Population (N=35) and then the data for each variable reported as either mean +/- standard deviation or absolute number (percentile). For ASA class, the category labels for ASA classification should be listed in the left column, and then the number in each category (with the percentile in parentheses) should be in the right column. As it is now, it is unclear that the numbers 2, 3, and 4 represent the ASA category and not the number of patients.

Response:

We thank the reviewer for the careful assessment of our Tables. We have made the changes to make these items more readable and clear.

2. Table 3: Can you explain how you are finding no correlation between bicarbonate and base deficit (r= -0.08)? These two measures are highly correlated in multiple prior studies, and if the bicarb was obtained from the blood gas analyzer then these two measures should be almost perfectly correlated.

Response:

We would like to thank the reviewer for spotting this error. The reviewer is exactly right. We re-assessed the bicarbonate values and found that some of the values were transposed. We corrected the errors and re-ran ALL analyses that included the bicarbonate, and ALL data was re-inspected and re-ran to confirm that this was an isolated error. The corrected values have been corrected in Table 3. The correlation for bicarbonate and BD was -0.94 (p = 0.0001). These corrected data do not affect the interpretation of our results.
Reviewer #2

To the authors,
This manuscript has been improved substantially after their revision. However, their presentation of data is still not good enough to understand. Please correct the Results part as shown below.

Major Compulsory Revisions

1. Explanations for Figure 2 is too poor. I think this is a key message of this study that base deficit did not correlate well with serum lactate. Please explain more and more in their Results section about this important findings. Fig 3 is also proving an important information, please add more explanation for Fig. 3 as well.

Response: We thank the reviewer for their comments, and we have added text in the Results and the Discussion to address these concerns.