Reviewer's report

Title: Predictors of the accuracy of pulse-contour cardiac index and suggestion of a calibration-index: a prospective evaluation and validation study.

Version: 2
Date: 30 January 2015

Reviewer: Alexey Smetkin

Reviewer's report:

Major Compulsory Revisions:
1. Materials and methods. 7th paragraph. It is not clear why did authors use bias Cltd – Cipc exceeding 20%, 15% and 0.5 L/min/m2 as thresholds for recalibration of pulse contour analysis?

2. It is known that systemic vascular resistance may influence the accuracy of pulse contour analysis. Have you analyzed a dependence of bias Cltd – Cipc on absolute value of systemic vascular resistance (for example, at time immediately before next TPTD) and on changes in this variable within calibration free period?

Minor Essential Revisions:
1. List of abbreviation: EVLWI and GEDVI absent in the article. Please, remove that.

2. Table 2: Probably, it is not correctly written “Bias Cltd – Cipc # 20% (15%, 0.5 L/min/m2)” I suppose that it should contain a sign “minus”: “Bias Cltd – Cipc # –20% (15%, 0.5 L/min/m2)”.

3. Table 4: What do the RR syst and RR diast mean? These are not clarified under the table.

4. Legends for Figure 4: The description should contain information relating to the described figure. Please remove “also” which demonstrate the relation of Figure 4 to the previous figure.

5. Legends for Figure 4: “Cltd(base): Cardiac index measured at previous (baseline) thermodilution” is absent on this figure. Please, remove.

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:
I declare that I have no competing interests