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In Reply:

We sincerely thank Drs. Vistisen and Scheeren for their insightful comments regarding our recent article.[1] The authors pinpointed that calculating predictor and outcome variables from the same baseline may induce theoretical methodologic misinterpretations. Even though we agree with their point of view, we are convinced that it has less impact on our results.

Vistisen and Scheeren claimed that Guinot *et al.*'s study[2] was the only work that addressed the mini-fluid approach with good methodology because it had a new baseline measurement five minutes after each mini-fluid challenge. Interestingly, the results from this study are very close to ours. The area under the receiver operating curve of that study was 0.93 (95% CI, 0.8 to 0.97) and 0.95 (95% CI, 0.90 to 0.99) in our study. The best cut-off value was 7% (6% in our study), gray zone ranged between 3 and 8% including 14% of patients (4 to 7% including 19% of patients in our study). This highlights similarity of the results observed whether we use the methodology recommended by Vistisen and Scheeren or ours. The potential "artificial boost of predictive power of the mini-fluid challenge," induced by our methodology, claimed by Vistisen and Scheeren, is clearly not obvious.

The concept of mini-fluid introduced by Muller *et al.*[3] is to infuse a small quantity of fluid to test whether stroke volume will increase. The major advantage of this concept is to stop fluid administration when stroke volume does not increase after a small fluid infusion, thereby reducing ineffective volume administration. The mini-fluid challenge helps the physician to predict fluid responsiveness and fluid unresponsiveness. We fully agree that standard strategies based on international recommendations and cited by Vistisen and Scheeren improve patient outcome. In two thirds of cases, however, these strategies lead to ineffective fluid administration.[4] A mini-fluid approach could decrease the rate of unnecessary fluid administration and consequently increase the benefit of fluid optimization. Further studies are warranted to investigate this issue.

To conclude, we agree that mathematical coupling exists between the effects of mini-fluid challenge and volume expansion. However, based on previous studies and ours, with all due respect, we completely disagree that mini-fluid challenge resembles a self-fulfilling prophecy design. A fluid challenge can be looked at as a bet; if we have to lose this bet, let's make sure to lose as little as possible!

Competing Interests

Dr. Biais received honoraria from Edwards Lifesciences (Irvine, California) and Pulsion Medical System (Feldkirchen, Germany) for lecturers. The other authors declare no competing interests.

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Assessing Glucose Meter Accuracy: The Details Matter!

To the Editor:

We read with great interest the recent article by Dr. Karon *et al.* titled "Accuracy of Capillary and Arterial Whole Blood Glucose Measurements Using a Glucose Meter in Patients under General Anesthesia in the Operating Room."[1] We congratulate the authors on identifying a glucose meter potentially safe for insulin dosing in the perioperative environment using both capillary and arterial samples, given that no glucose meter is currently approved by the U.S. Food and Drug Administration for use with capillary (fingerstick) samples in critically ill patients.[2] Using this meter may offer