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**Comment on Kalfon et al.:
Tight computerized
versus conventional glucose
control in the ICU: a randomized
controlled trial**

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Dear Editor,

We are writing to briefly comment on the article “Tight computerized versus conventional glucose control in the ICU: a randomized controlled trial” by Kalfon et al. [1]. As long-time supporters and implementers of glycemic control we applaud the authors’ effort, especially in using a computerized method, which can be difficult to implement effectively with good compliance. We equally applaud the desire to keep intervention intervals similar and in measuring compliance. These are all less well recognized, but critical, confounding factors in providing safe, effective control.

However, we feel the need to point out that any results for any glycemic control protocol can only be viewed in the context of the control protocol used—in this case a computerized protocol (CDSS). Thus, where it states “Tight computerized glucose control with the CDSS did not significantly change 90-day mortality and was associated with more frequent severe hypoglycemia episodes in comparison with conventional glucose control”, it must be noted that this increase in hypoglycemia is

strictly a function of that control method.

Our own results with computer model-derived [2] and computerized, model-based [3] control have yielded reduced hypoglycemia (2–4 % by patient) than conventional control and been replicated elsewhere, despite lower glycemic targets than some studies. This outcome has been experienced by others, as well [4, 5].

In addition, also on the basis of our experience, we feel that it will be essentially impossible to control glycemia without controlling nutritional intake or accounting for it in insulin dosing. Without that data the patient’s effective sensitivity to insulin cannot be assessed, and thus insulin is titrated to a poor or clouded surrogate (blood glucose level), creating increased hypo- and hyperglycemic risk and uncertainty in dosing.

Thus, given that the increased risk of mortality and morbidity with hyperglycemia is well known and documented from the cellular to individual outcome level, we feel we should strongly reiterate that the real problem is addressing the inter- and inpatient variability that make providing safe, effective control difficult.

That this study has struggled with it does not discount the value of the therapy or further efforts. More directly, it is not what we do, but how it is done that counts.

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