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Correction

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Electronic supplementary material

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Dear Editor,
In the course of repeating some of the analyses that contributed to our publication [1], we noticed that the equation used to calculate the glycaemic lability index (GLI) was slightly different from the original description of this metric. Readers familiar with the GLI who looked at the equation used, presented as Equation ESM4, will have been

aware of this. We were concerned that this may have altered some of the conclusions that we came to in our paper, and so have repeated the key analyses using the original equation.

In our original analysis, the glycaemic lability index was calculated as:

$$\sum_{n=1}^{N-1} \frac{(gluc_{n+1} - gluc_n)^2}{t_{n+1} - t_n},$$

for a series of N glucose values in which $gluc_n$ and $gluc_{n+1}$ are consecutive glucose values measured at times t_n and t_{n+1} , respectively. However, in the original description, the GLI [2] was summed over 168 consecutive hours (1 week) only, rather than over a patient's entire observation period. In our study the patient's observation period on ICU ranged from 0.21 to 6,672 h, and to obtain a GLI as originally described we should have applied a correction factor to normalise each value to 168 h:

$$\sum_{n=1}^{N-1} \frac{(gluc_{n+1} - gluc_n)^2}{t_{n+1} - t_n} \times \frac{168}{t_N - t_1}.$$

The relationship between the new and original values for GLI are presented in Table ESM1 and Figures ESM1 and ESM2.

New values for GLI results in subtle changes to the relationship between metrics (Fig. 1) and, if anything, strengthens the main message of the paper (Table ESM2). We believe that we have a responsibility to the editors of ICM, the journal's readers, and ourselves, to bring this to your attention.

References

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2. Ryan EA, Shandro T, Green K, Paty BW, Senior PA, Bigam D, Shapiro AM, Vantyghem MC (2004) Assessment of the severity of hypoglycemia and glycaemic lability in type 1 diabetic subjects undergoing islet transplantation. *Diabetes* 53:955–962

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Fig. 1 Cluster analysis dendrogram of the metrics of glycaemic control. This figure is based on Fig. 1 in our original publication but uses corrected values for the glycaemic lability index