Introduction

Negative outcomes of dysglycemia are associated with exposure and repetition to high glucose levels, indicating that metrics of exposure might influence outcome.

Objectives

This research addresses the key questions:

- Is glycemic control associated with improved hospital mortality regardless of how it is achieved?
- Is there a metric of glycemic control performance or level that can be assessed in real time to adequately discriminate between patient outcomes?

Methods

- Retrospective analysis of data from two glycemic control studies.
- Glycemic performance metric: cumulative time in band – cTIB

"cTIB is the percentage of glucose measurements within a specified band from the start to the present time"

"Yes, and it captures both glycemic level and variability"

"We investigated three different glycemic bands and four cumulative time in band thresholds"

","A higher threshold level indicates less tolerance for dysglycemia and variability"

"A higher cumulative time in band is associated with a greater chance of survival"

Analysis by outcome glycemic performance rather than treatment group.

"A higher OR means a better chance of survival"

Results

<table>
<thead>
<tr>
<th>Band</th>
<th>4.0-7.0 mmol/L</th>
<th>5.0-8.0 mmol/L</th>
<th>4.0-8.0 mmol/L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odds</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Ratio</td>
<td></td>
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</tbody>
</table>

Conclusions

- Yes! Glycemic control is associated with improved hospital mortality regardless of how it is achieved.
- Yes! there is a metric of glycemic control performance or level that can be assessed in real time to adequately discriminate between patient outcomes.