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## Efficacy and safety of SPRINT and STAR protocol on Malaysian critically-ill patients

(Conference Paper)

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### Abstract

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Intensive care unit patients may have a better glycaemic management with the right control protocol. Results of virtual trial performance on Malaysian critically-ill patients adopting a model-derived and model-based control protocol known as SPRINT and STAR are presented in this paper. These ICU patients have been treated by intensive sliding-scale insulin infusion. The effectiveness and safety of glycaemic control are then analysed. Results showed that patient safety improved by 83% with SPRINT and STAR protocol as the number of hypoglycaemic patients significantly reduced (BG < 2.2 mmol/L). Percentage of time within desired bands and median BG improves in both SPRINT and STAR. However, the improvements are associated with higher number of BG measurements (workload). © 2016 IEEE.

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